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ESSENTIALS OF INDIAN ECONOMICS

BY

B. G. SAPRE, M.A.

Professor of History & Economics : Willingdon College, Sangli.
Author of : The Growth of Indian Constitution & Administration.
Economics of Agricultural Progress, &c., &c.

FIRST EDITION

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PREFATORY NOTE

A glance at the list of select references will show that books dealing with Indian Economics are many, and there are many others not included in that list. And yet I felt that there was room for the addition to it of one more book. Indian Economics is becoming an important subject of study in our Universities. Though there are valuable Reports and books on separate questions, books attempting to treat the subject as a whole are few. Some of them are mere sketches, and in others pieces of Indian Economics are sandwiched between long dissertations upon ordinary economic theory. The student, as a result, gets confused and is not able to appreciate the inter-relation between various parts of the subject of Indian Economics. By assuming that the reader has a good grounding in the theory of Economics I have been able, in the present book, to devote myself, almost exclusively, to Indian economic conditions and to arrange the subject in a manner that clearly shows the *historical* as well as *organic* relation between the various problems of Indian Economics.

My difficulty has been not in *adding* to the volume but in making it as small as is consistent with an intelligent treatment of a vast subject. I am aware of important gaps in that treatment, *e.g.* Indian Finance, Land Tenures, Land Revenue, etc. for which

the reader must refer to other books. But I hope that the outline here attempted is not marred by the simplification that has resulted from the exclusion of such subjects. I shall gratefully receive helpful suggestions and criticisms.

I must thank the Librarian of the Servants of India Society, Poona, for his kindness in giving me full access to the valuable collection of books of that Institution.

B. G. S.

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SELECT REFERENCES FOR READING.

N. B. The following list of books is intended for students desirous of reading more on the subject. It follows the order of treatment in the book. I have taken care not to burden it with too many references.

* Indicates a Government publication.

† Indicates that the book will be found useful from the *exam.* point of view.

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 - 1. *Agricultural Wages in the Bombay' Presidency.***
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 - 3. *Wages & Hours of Labour in the Cotton Textile Mill Industry—Bombay, 1923.***

By the Same Author

"The Growth of Indian Constitution and Administration"

SELECT OPINIONS AND REVIEWS

ON THE FIRST EDITION

(1) It is an excellent piece of work, designed in the first place for university students, but no less serviceable for a much wider public. Mr. Sapre is a master of his intricate subject and of the English language. He writes with a clarity and conciseness that are worthy of high praise.

London, Oct. 11, 1924.

The New Statesman.

(2) It is a careful and well-balanced account of the essential elements of the subject and should form a valuable guide to students who desire to study the Constitution of 1919 in the light afforded by the earlier legislation and by the history of the administrative arrangements based on that legislation. While there are matters on which difference of view is possible, I consider that the standard of accuracy achieved is in every way satisfactory, having regard to the great difficulty of the task."

DR. A. BERRIDALE KEITH,

University of Edinburgh, Scotland.

(3) "I think your book is a most scholarly work, distinguished by sobriety of thought and much knowledge of an intricate subject, which you explain clearly and concisely."

Principal H. G. RAWLINSON, M.A., I.E.S.,

Deccan College, Poona.

By the same Author

ECONOMICS

OF

AGRICULTURAL PROGRESS

Reviews and Opinions

(1) The author appears to have taken a great deal of trouble in collecting facts and figures and very skilfully compressed them within two hundred pages.The book should prove very useful not only to students of economy and agriculture but to those who want to know the real condition of India, specially its vast economic and agricultural situation in the present state of affairs.

The Englishman.

Calcutta, 10-1-1927.

(2) We strongly recommend this suggestive book to those who are interested in knowing something of how the glory of feeding India's starving millions is possible by rational means.

Bangalore, Aug. 1927.

Mysore Economic Journal.

(3) Your study of Indian conditions is clearly based on wide reading and much thought. It displays critical acumen, sense of proportion, appreciation of what is practicable, and its lucid and effective exposition renders it well worth study even by experts. I have no doubt that it will receive the attention which it merits from readers in India.

University of Edinburgh,
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DR. A. B. KEITH,
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ESSENTIALS OF INDIAN ECONOMICS

PART I

INTRODUCTORY

CHAPTER I

WHAT IS INDIAN ECONOMICS ?

(1) NATURE OF POLITICAL ECONOMY—Our ability to answer correctly the question 'what is Indian Economics' depends upon our right appreciation of the nature and scope of the science of Political Economy or Economics. If we understand by Political Economy a body of laws about wealth that are perpetual in operation and universal in application then there can be only one such science, as there is one science of Physics or of Astronomy, and a separate 'Indian Economics' would be meaningless. The Classical or Orthodox English writers on this subject, e.g. Ricardo and Senior made such a claim for Political Economy. As a matter of fact, however, their Political Economy was greatly influenced by the industrial conditions then prevailing in England. At that time England was just emerging from the Industrial Revolution; large-scale production was becoming the order of the day; there was keen competition between capitalists and labourers; the labourers were ill-organized and helplessly dependent upon capitalists for employment; the population was increasing rapidly and wages were

low; on account of the restrictions of the 'Corn Laws' the price of wheat was high and so also were agricultural rents; export-trade was becoming more important than domestic trade; the manufacturers wished to be left to themselves; the dictum of *laissez faire* as properly defining the functions of the State was gaining ascendancy. This English Political Economy has been aptly described as the Political Economy of 'Western Industrialism' in its early stages and characterized as insular in its outlook. But it was claimed that its 'laws' were immutable and universal, and deducible from a few axioms. The method of this Political Economy was the 'Abstract' or 'Deductive' method.

But there was a reaction against this view of Political Economy. It was particularly strong in Germany where political and economic conditions were quite different from those of England, and where, therefore, the maxims of English Political Economy were found inapplicable, inconvenient or harmful. The German writers recognized the *relativity* of economic phenomena. This is now an accepted truth. As Prof. Seligman says*: "Man is a product of history; economic institutions, like all other social facts, have their roots in the past. What is, is the outcome of what has been. With every mutation in outward conditions and social relations there comes a change in the economic facts or in the methods devised to secure adaptation of means to end. Nothing is so rare as the historical perspective; nothing so difficult to realize as the relativity of existing institutions." The German writers—and Frederic List particularly—

* Seligman's *Principles of Economics*, 7th Edn. p. 26.

emphasized the importance of the national view-point in economic matters. List showed that the interests of the individual and of the State did not always coincide; he attached more importance to the prospective, full and many-sided development of the productive powers of the people than to the present cheapening or mere accumulation of tangible wealth. The German writers accordingly ascribed divers and important functions to the State whose interests were more permanent than and superior to those of the individual. This meant that every country should have its own national system of Political Economy. In the hands of the German writers the treatment of Political Economy became Historical and Inductive. We may summarise the position of the German writers by saying, in the words of Ranade,* that they regarded universalism and perpetualism in economic doctrine as both unscientific and untrue.

If, then, we regard Political Economy as a science dealing with the economic activities of men as conditioned by their physical and social environment and as coloured by their historical and intellectual traditions then we can have a separate branch of Indian Economics. Nobody should insist that the 'laws' of Indian Economics should be absolutely peculiar to India. Other countries have passed through similar stages of development and a careful study of Indian conditions may lead us to conclusions which either confirm the laws of Western Political Economy or suggest their modification. It must be borne in mind that the psychological (or, as they have been called, hedonistic) laws have a wider application. Again,

* Ranade : *Essays on Indian Economics*, 3rd Edn. p. 20,

economic conditions in India, as will be shown in the following pages, are in a process of change and approximation to Western conditions. The process is slow, though the Great War has accelerated it. The greater the approximation, the closer will be the applicability of Western Political Economy to India. But as the change has only recently begun, there is sufficient scope for what may be called a 'realistic' study of Indian economic conditions. As the change becomes pronounced the purely economic laws, e. g. those of money, prices, etc. will have a wider application in India. From this point of view, therefore, a comprehensive science of Political Economy is being gradually built up, and of that science Indian Economics is a part.

(2) SEPARATION OF INDIAN ECONOMICS—Some writers, e. g. Prof. Bhatnagar,* are chary of using the term 'Indian Economics' as it suggests that it is a definite science. They do not believe that we need have a separate science "to discover and develop those peculiar unities which underlie the economic activity of the people of India." Prof. Bhatnagar, for example, suggests that we should use the expression 'Indian Economy' for 'Indian Economics.' Prof. Brij Narayan, though he would not eschew the words 'Indian Economics,' would use them to indicate† "that mass of statistical and other material which would be of invaluable help in the solution of Indian economic problems. It does not mean a science with peculiar laws or principles, or any proposed solutions of Indian economic problems, or any new method or methods of dealing

* B. G. Bhatnagar : *Bases of Indian Economy*. p. 3.

† Brij Narayan : *Indian Economic Problems*, Part I. p. 20.

with them." Prof. Panandikar* doubts whether in view of the rapid changes now taking place in the country a separate 'Indian Economics' is necessary.

While we do not claim Indian Economics to be a science *sui generis*, we regard it as something more than a mere mass of information. It should attempt at a comprehensive survey of past or present economic conditions in India and indicate their reorganization with a view to securing the betterment of the material condition of the Indian people. The use of the term 'economics' in this sense is quite legitimate for we have got a book entitled '*British Economics*' by Lawson which deals with economic conditions and fiscal policy of Great Britain in the years 1904-1905.

Ranade was the first Indian writer to argue that the principles of English Political Economy were not applicable to India in their entirety. Indian conditions were different from those in England. "With us an average individual man is, to a large extent, the very antipodes of the economical man. The family and the caste are more powerful than the individual in determining his position in life. Self-interest in the shape of the desire of wealth is not absent, but is not the only or principal motor. The pursuit of wealth is not the only ideal aimed at. There is neither the desire nor the aptitude for free and unlimited competition except within certain predetermined grooves or groups. Custom and State regulations are far more powerful than competition, and status more decisive in its influence than contract. Neither capital nor labour is mobile and enterprising and intelligent

* Prof. Panandikar : *Economic Consequences of the War for India*, p. 409.

enough to shift from place to place. Wages and profits are fixed, and not elastic and responsive to change of circumstances. Population follows its own laws, being cut down by disease and famine, while production is almost stationary, the bumper harvest of one year being needed to provide against the uncertainties of alternate bad seasons.”*

It must be admitted that since Ranade wrote these words things have moved rapidly in India. The pace was quickened by the Great War. Yet his words are true with reference to large tracts of the country and larger sections of the Indian population. Our social and economic life still answers another description given by Ranade in these words†: “Our habits of life are conservative to a fault. The aptitudes of climate and soil facilitate the production of raw materials. Labour is cheap and plentiful, but unsteady, unthrifty and unskilled. Capital is scarce, immobile and unenterprising. Cooperation on a large scale of either capital or labour is unknown. Agriculture is the chief support of nearly the whole population, and this agriculture is carried on under conditions of uncertain rainfall. Commerce and manufactures on a large scale are but recent importations, and all industry is carried on on the system of petty farming, retail dealing and job-working, by poor people on borrowed capital. There is an almost complete absence of a landed gentry or wealthy middle class. The land is the monopoly of the State. The desire for accumulation is very weak, peace and security having been almost unknown over large areas for any length of time till within the last century. Our laws and insti-

* Ranade : *Essays*, p. 9-10.

† Ranade : *Essays*, p. 22-23

tutions favour a low standard of life, and encourage subdivision and not concentration of wealth. The religious ideals of life condemn the ardent pursuit of wealth as a mistake to be avoided as far as possible. These are old legacies and inherited weaknesses. Stagnation and dependence, depression and poverty—these are written in broad characters on the face of the land and its peoples. To these must be added the economical drain of wealth and talents which foreign subjection has entailed. As a compensation against all these depressing influences we have to set off the advantage of a free contact with a race which has opened the country to the commerce of the world, and by superior skill and resources has developed communications in a way previously unknown.”

Here, again, signs of change—and in some cases profound change—are in evidence. But the description is useful as a text to be explained, criticized, corrected or confirmed in the pages that follow.

Not only would Ranade separate Indian Economics but he would lay down the following as its fundamental principles. (1) Ranade is emphatically opposed to the Classical theory of Free Trade based upon a territorial division of labour according to which the tropical regions are to be perpetually condemned to the production of raw materials and food grains and therefore to a lower economic and social organization. (2) As the State has been mainly instrumental in bringing about the economic transformation that is taking place in the country, it is its responsibility to guide it along proper lines. Thus in the field of *production* it must encourage manufactures by the right fiscal policy, encourage agriculture, and industries allied with agriculture, encourage colonization of

waste lands, extend irrigation, etc. In the field of *distribution* Ranade holds that the celebrated Law of Rent as formulated by Ricardo does not apply to India where property in land is diffused and frequently changes hands. Similarly the theory that rent does not enter into price is not true of Indian conditions where State is the landlord and rent is a monopoly rent. This points to the importance of a right Land Revenue Policy. Again the State in India must intervene to protect its own ryots and other tenants in the *ryotwari* tracts, and the tenants and sub-tenants in the *zamindari* tracts. The State must also intervene to protect the ryots from the money-lender. All this points to the abandonment of the *laissez faire* policy and the adoption of an active policy for the welfare of the people. The functions of the State are widening even in Western countries and they should all the more do so in a backward and conservative country like India, especially as the Rulers belong to a race with superior powers of organization and better knowledge of Western Science and Industry.

The State in India has accepted these principles and its policy is based upon them. As a result of that policy and of other forces Western conditions are coming into existence in India. It is difficult to say whether the transformation will be as rapid and complete as in the West. If it should be so Western Political Economy will have immediate and full application. Should the transition on the contrary be slow, partial or peculiar as seems likely, then there would be sufficient justification for a separate branch of Political Economy, viz. Indian Economics.

(3) SCOPE OF INDIAN ECONOMICS—We should have a three-fold object in the study of Indian Economics.

(1) a study of the economic conditions of the different parts of India in the past. This would be a purely historical enquiry and would throw light upon our characteristic social or economic institutions, e. g. the village community, the caste system, land tenures, etc. (2) A study of the present economic conditions in India. The method to be followed would consist in careful observation and scientific interpretation of existing facts. To be useful the enquiry should be 'realistic.' (3) 'Indian Economics' may have a practical object: the formulation, namely, of a policy or policies for the better well-being of the Indian people.

In the formulation of such policies the *national* aspect must be constantly kept in view. The conception of 'Indian' Economics is the direct outcome of the establishment of British rule in India and the resulting political and economic unity of the country. We do not now regard the different provinces of India as separate units but as parts of a larger entity, namely, India (including the Indian States). We should not so confine ourselves to the study of the economy of a particular region, tribe or community or so pursue provincial or parochial interests as to forget the *national* aspect of the question. We think of India as whole, and of all the people of India. All policies are judged according to this criterion: whether they promote or retard the economic welfare of *Indians*. Wealth in the abstract has no meaning. We must study it in relation to the welfare of an individual or community. In 'Indian Economics' we study wealth in relation to the welfare of the Indian people.

The expression 'Indian Economics' may also mean the economic doctrines of Indian thinkers and law-givers of antiquity. In view of the advanced stage of

civilization and prosperity that was once attained by us, we should expect a great deal of thought devoted to the subject of wealth. We find this thought scattered in the writings of such law-givers as Manu, or in epics like the *Mahabharat*, or systematically arranged in such treatises as the *Artha-Shastra* of Kautilya. Needless to say that this field of research is most promising.

CHAPTER II

PHYSICAL GEOGRAPHY AND METEOROLOGY

(I) PHYSICAL CONDITION*—It is unnecessary to dilate here upon the dependence of our economic activities upon our natural environment. In this chapter we shall study this environment under two heads: (1) Indian Physical Geography and (2) Indian Meteorology. Both divide the country into certain well-marked 'Natural Divisions' which will be considered at the end of the chapter.

For a proper appreciation of the economic life of India—no less than for its political history—we must include in that term not merely the wide continent which stretches southward from the Himalayas to Cape Camorin, but also the vast entourage of mountainous plateaux and lofty ranges which remain an everlasting wall between it and the rest of Asia, and across which through all historic ages its land approaches have been found.†

Mountainous Borderland—Of India in this larger denotation we have thus two great divisions: the extra-peninsular area of highland and lowland—Baluchistan, Afghanistan, Kashmir, the Himalayas and Burma; and then the true Peninsula including the Indo-Gangetic Plain.

In the western and north-western borderland lie the main mountain passes through which successive

* The student is strongly recommended to read this chapter with the help of a large physical map of India.

† This description is based upon *Imperial Gazetteer* Vol. I. Ch. I.

waves of conquerors invaded India, and through which also trade was carried on with the countries beyond. To the north lies the Himalayan range. On the west it is enclosed by a sharp bend of the Indus, and on the east by a similar bend of the Bramhaputra. "The two rivers starting from nearly the same central point form deep troughs at the back of the Himalayan system during their earlier and glacier-fed stages of existence. They may be considered as the natural drains of a gigantic ice-bound wall, pouring their glacial floods in opposite directions to either side of India. Their deeply eroded valleys are, however, but scratches on the vast surface of the elevated region of which the Himalayas with their multiplied bands of ridge and range form the abutment. The Himalayas are the wrinkled and corrugated southern edge of the great Tibetan plateau". *

Next to the Himalayas comes Kashmir which occupies a position of great economic significance to India. It is the basin of the Indus and the Jhelum. Here also are born the infant streams that feed the Indus: the Chenab, the Ravi and, to a great extent, the Sutlej. It is thus the great natural store-house of water on which the wealth of a third of India depends.†

Just as the Indus forms the north-western boundary of the Himalayas, the Brahmaputra forms their south-eastern boundary. The valley of the Brahmaputra is the highway between the Tibetan plateau and the plains of Assam. Assam itself is cut off from North Burma by impassable hills to the east of which lie the delightful valleys of the Chindwin and the

* *Imp. Gaz.* Vol. I. p. 15.

† *Of. Imp. Gaz.* Vol. I. p. 16.

Upper Irrawady, full of cultivation and possessing good climate and much mineral wealth. Lower Burma does not possess these advantages.

The Indo-Gangetic Depression.—From this mountainous borderland Peninsular India is separated by a broad interval of low flat country known as the Indo-Gangetic Plain. In many respects this is the most important physical feature of India. Within the basin of the Ganges have ever been founded the chief kingdoms of the plains; the most ancient cities; the earliest centres of civilization, of industry and of wealth. The Gangetic basin is one of exceptional fertility. Where the Ganges and the Brahmaputra unite, there India widens out into an endless panorama of irrigated fertility; a wide net-work of canals; an endless procession of picturesque villages containing a swarming population. Very gradually this merges southwards into the deadly swamps and flats of the Sunderbans.

It is impossible to exaggerate the economic importance of the Gangetic system—the Ganges and the Jumna with their affluents: the Chambal from the uplands of Central India, and the Gogra and the Gandak from the Himalayas. The combined deltas of the Ganges, the Brahmaputra and the Meghna occupy an area of 50,000 sq. miles.

Thus the wealth and prosperity of the United Provinces, Bihar and Bengal depend upon the Gangetic basin and delta. Upon the banks in the present day are such centres of wealth and commerce as Calcutta, Patna, Benares, Allahabad and Cawnpore, with Agra and Delhi on its affluent, the Jumna. "There is not a river in the world which has influenced humanity or contributed to the growth of material civilization,

or of social ethics, to such an extent as the Ganges. The wealth of India has been concentrated in its valley, and beneath the shade of trees whose roots have been nourished by its waters the profoundest doctrines of moral philosophy have been conceived, to be promulgated afar for the guidance of the world." *

Similar to the Gangetic basin is that of the Mahanadi (which includes the eastern half of the Central Provinces and a part of Madras) and its delta forms the chief feature of the fertile flats of Orissa.

The Brahmaputra, after leaving the Assam valley, sweeps in a magnificent curve round the western spurs of the Garo Hills, and being joined by the Meghna itself joins the Ganges. Unlike the Ganges and the Indus, the Brahmaputra is not utilized for irrigation; but its silt-charged overflow annually replenishes the adjoining land and thus maintains its fertility. The main river is navigable for 800 miles, from the sea to Dibrugarh.

The western part of the Indo-Gangetic Depression, i.e., the basin of the Indus and its affluents, differs in many respects from the eastern, i.e. the Gangetic basin. "The rivers of the Punjab when they reach the plains pass through flat regions of interminable waste rolling down their mud-coloured flood in the snow-melting time of the Himalayas; or they wind in snaky twists about the floor of their wide beds, between banks which are ever changing, contributing new shoals and islands here and there, and shifting their channels yet farther and farther afield in uncontrollable vagary. Science has yet to devise a method of restraining the rivers of the Punjab." †

* *Imp. Gaz.*, Vol. I. p. 26. † *Imp. Gaz.*, Vol. I. p. 33.

South-east of the Indus stretches the great Indian Desert. The Aravalli Hills divide the Rajputana into two unequal parts—the north-west portion constituting the Desert, terminating towards the south in the Rann of Cutch. In this part the population is very sparse, the only notable cities being Jaisalmer and Bikaner. Rajputana to the south of the Hills, though still sandy, has two rivers, the Chambal and the Banas, and contains the celebrated cities of Jaipur, Ajmer, Udepur and Jodhpur. The desert aspect of this part of Rajputana is lost towards the south in the forest-clad mountains of Central India.

Transitional—From the valley of the Ganges towards the south India slopes gently upwards to a central transverse water-parting which crosses the Continent from west to east, culminating in the Vindhya Range on the west and the Mahadeo and Amarkantak Hills on the east. From the Amarkantak three rivers take their rise and flow in different directions: the Son, north-east to the Ganges, the Mahanadi, south-east to the Bay of Bengal and the Narbada, west to the Arabian Sea.

The Vindhya Range is bounded on the south by the deep trough of the Narbada between which and the Tapti further south lies the range of the Satpuras.

Peninsular India—South of the Tapti river commences the Deccan—that striking physical feature which shapes the whole continent of India, the great three-cornered upheaval which, abutting on the line of the Western Ghats, gradually slopes towards the step formed by the Eastern Ghats overlooking the Bay of Bengal. Fringing this central sloping plateau on either side is a narrow strip of coast land, which comprises the lowlands of Bombay

on the west and of Madras on the east. In the district of Malbar the Western Ghats merge into the uplands of the Nilgiri Hills from 7000 to 8000 feet high. The Nilgiri Group may be regarded as the orthographical apex of the Deccan highlands which occupy a central triangular space of the Peninsula, with its two arms represented by the Western and Eastern Ghats respectively.

Southward from the Nilgiris, but separated from them by the well-defined Palghat Gap, the line of the Western Ghats is continued in the Anaimalai and other smaller groups. Between these southern hills and the Eastern Ghats an expanse (100 miles in width) of lowlands forms the richest section of the Madras Presidency. Northward from Madras and following the curved coast line stretch the Eastern Ghats. Unlike the Western Coast south of the Tapti, the Eastern Coast is broken by the mouths of many large rivers that flow through Central and Southern India. The fertile deltas of the Krishna, the Godavari and the Kauveri together form the most remarkable feature in the economic geography of Madras. All these rivers rise in the Western Ghats and traverse the Deccan and their deltas have been made more productive by extensive systems of irrigation.

To the extreme south of India we have the Tinnevelly and Madura districts separated from the Travancore State by a chain of mountains known as the Southern Ghats. The two districts are treeless plains, mostly barren; Travancore, on the other hand, is a rich undulating country with abundant rainfall and its coast line is an unbroken line of cocoanut and areca palms.

(2) METEOROLOGY OF INDIA*—India is *par excellence* the land which experiences monsoon conditions, i. e., dry land winds, with little cloud and rain, during one half of the year, and winds of oceanic origin, with high humidity, much cloud and frequent rain, during the other half.

The physiographic aspects which determine these conditions have been already described. The mountainous borderland cuts off India from the lower air currents of the Asiatic continent; but during the hot season air currents blow from land to sea, and during the rainy season from the sea to the land. We may call the air currents of continental origin as *North-East* monsoon, and of oceanic origin as *South-West* monsoon. The North-East current gives only occasional rain, but more than 90 p. c. of the total rainfall of India is due to the South-West current. Each monsoon is further divisible into two periods—the cold-weather (Jan.-Feb.) and hot-weather (Mar.-May) North-East monsoon, and the advancing (June-Sept.) and retreating (Oct.-Dec.) South-West monsoon. The rainfall of the N.-E. monsoon is considerable in the sub-montane regions of the North; a few showers accompany the storms in the Plains; the amount is very small in Burma and practically *nil* in Peninsular India. The S.-W. monsoon gives rain to most parts of the country.

If we take the average annual rainfall for the whole country as 45 inches, the relative importance and distribution of the two monsoons will be seen from the following figures:—

* Based upon *Imp. Gaz.* Vol. I. Ch. III.

	Inches
Cold Weather (Jan.—Feb.) N. E. ...	0·99
Hot Weather (Mar.—May) N. E. ...	4·58
Advancing (June—Sept.) S. W. ...	34·65
Retreating (Oct.—Dec.) S. W. ...	4·95
	<hr/>
	45·17

The oceanic current as it approaches the Indian continent from South is split up into two parts—the Arabian Sea current and the Bay of Bengal current. The former is probably three times as great in volume as the Bengal current, but it is deprived of a greater part of its moisture as it ascends the barrier of the Western Ghats with the result that though the rainfall is very heavy on the coast line, it is scanty and precarious over the Deccan Plateau. The northern portion of the same current which crosses Kathiawar, Cutch and Sind gives showers on the coast but none as it passes over the Desert. The Bay of Bengal current enters the land between Chittagong and Puri and passes up the Assam valley where there is very heavy rainfall. The rest of the current is deflected westward on account of the barrier of the Himalayas, giving general rain over the plains. “The Bay current is more effective as a rain-distributing current than the Bombay current, as it is not directly impelled against and across a line of hills, and forced by ascent to part with the greater part of its moisture before reaching the interior, but advances up a broad river plain the elevation of which increases very slowly with distance from the sea.”*

* *Imp. Gaz.*, Vol. I, Ch. III, p. 123,

In an entirely agricultural country like ours with a sharply-defined rainy season, it is not only the *amount* of rain but also its proper *distribution* that vitally affect the well-being of the people. From this point of view the common variations from the normal commencement and distribution of rainfall are of the utmost significance to the cultivators. They are the following: (a) Delay in the commencement of the monsoon which is frequently experienced in Northern Bombay and North-Western India. (b) Prolonged break lasting over the greater part, or whole, of July or August (most frequently August). (c) Early termination of the rainy season causing partial or total failure of crops. (d) Or the rainfall may be in excess in one place and deficient in another. This last variation occurs every year.

Similar variations with regard to the retreating S.-W. monsoon have been noticed. There is a close relation between the amount of rainfall that Burma and Tennaserim on the one hand and Madras and Peninsular India on the other derive from this current, excess in one region being generally accompanied by deficiency in the other. Or, the rain may terminate earlier than usual in both the regions; or finally, the cold-weather rain may set in earlier than usual.

When these irregularities are spread over large tracts or over long intervals agricultural operations are most seriously interfered with resulting in single or successive, partial or complete, droughts and failures of harvests.

(3) NATURAL DIVISION—As a result of these diversified conditions of physical aspect and rainfall, the country falls into certain 'Natural' divisions. Taking the amount of rainfall alone as the determining factor

Sir George Eliot in his Census Report of 1901 recognized as many as 34 such divisions. Taking into account both geology and rainfall Sir Edward Gait, the Census Commissioner of 1911, reduced the divisions to 16 as follows :—

(1) *Lower Burma*—comprising the coast and deltaic districts of Burma from Arakan in the North to Mergui in the South. Mean annual rainfall, 150", 95 p. c. occurring from May to October. In the dry season the temperature is very high and hence the country is very unhealthy.

(2) *Upper Burma*—to the west and east of the Irrawady river. Rainfall is much smaller and more precarious than in Lower Burma.

(3) *Assam*—with the elevation of the Garo and adjacent hills in the centre. The most characteristic feature of the climate is the great dampness of the atmosphere all the year round. On the hills the precipitation is very heavy, that at Cherapunji being the highest registered anywhere in the world.

(4) *Bengal*—comprising the deltas of the Ganges and the Brahmaputra. Climate damp, mean annual rainfall increasing from 55" at Berhampore to 122" at Jalpaiguri.

(5) *Orissa, and Madras Coast—North*, stretching northwards from the Nellore district. The S.-W. monsoon is more important in Orissa than in the Madras districts. As most of the rainfall in this division occurs in connection with cyclonic storms, it is very irregular and severe droughts are not-uncommon.

(6) *Bihar, and the United Provinces—East*—Except for the hills on the borderland the whole area is covered by the Gangetic alluvium. It lies within the influence of the winter storms and receives showers

in the first two months of the year. Rainfall, about 47", uncertain in the northern parts of Bihar.

(7) *United Provinces West, Punjab East and North*—The south-western half is plain and the north-eastern is mountainous. From the middle of December to March the winter storms give rain to this region, it being heavier in the hills than on the plains. The amount varies from 14" to 85".

(8) *Kashmir*—of which the climate is by no means uniform. The S.-W. monsoon enters portions of this region. Disastrous floods occur on account of the melting of the snow and storms in the hot season.

(9) *The North-West Dry Area*—including South-West of the Punjab, the N.-W. Fr. Province, Sind and Western Rajputana. The driest division of India. Average rainfall, 10"

(10) *Baluchistan*—This region is beyond the S.-W. monsoon, its scanty rain being derived from depressions of the winter season.

(11) *Rajputana East, and Central India West*—Average rainfall is 25" and it is fitful.

(12) *Gujrat*—including Gujrat, Kathiawar and Cutch. A dry division, rainfall varying from 14" to 41".

(13) *Central India East, Central Provinces, Berar and Chhota Nagpur*.—The dry season extends from the middle of October to the second week of June. Here occasional downpours from the cyclonic storms of the Bengal current occur. Annual rainfall, 47", and very variable.

(14) *The Deccan*—comprising the Bombay Deccan, the Madras Deccan and Hyderabad and Mysore States. The period from December to February is dry. Average rainfall, 30", but precarious.

(15) *Konkan and Malbar*—comprising the coast

districts of the Bombay Presidency from Thana to South Canara, Malbar and the States of Cochin and Travancore. Heavy monsoon rain.

(16) *Madras South-East*—Considerable rain from the retreating monsoon, with occasional downpours from storms of the Bay current.

CHAPTER III

ECONOMIC TRANSITION IN INDIA

(1) HISTORY OF EXTERNAL TRADE.

(a) *Trade in Ancient Times* (2000 B. C. to 1000 A. D.)

Next to the size, configuration and climate of the country the factor that has now become most important is its geographical location. As a peninsula penetrating into the Indian Ocean from the Asiatic Continent Nature has made it a convenient meeting-place for the East and the West. It was not by an accident that India became the birth-place and cradle of religions and civilizations that overflowed its borders and spread over the East and the West. The country was equally well adapted as an emporium for the East and the West. We get references to its external trade dating from 2000 B. C. and the ancient period may be taken to extend from that time to 1000 A. D. In the first half of this period we get evidence of the closest relations—commercial, religious and even colonial—between India, the Eastern Archipelago and China. A small amount of trade was also carried across the land-frontiers of India, between Tibet and the trans-frontier regions on the North-West. Difficulties of communications confined ancient trade to costly and curious articles. Thus among the *imports* into India we notice copper, tin, lead; silk; corals; pearls; Chinese porcelain; Arabian horses. Among *exports* we notice precious stones, articles of iron and steel workmanship, cotton and silk fabrics; ivory; drugs and perfumes; indigo;

condiments and spices. As trade with maritime countries of the East was very active and coastal transport was cheaper than transport upon land, a prosperous ship-building industry had come into existence on the Western Coast as well as on the Bengal littoral. The exports (mostly finished articles) generally exceeded the imports in value, and the 'favourable' balance was received in a never-ceasing flow of the precious metals to India which has been a characteristic and much-noticed feature of her trade from remote times. Finally, this trade-activity was based upon an advanced social organization and entailed manifold duties on the part of the State. We find ample testimony to an elaborate state-craft—with detailed rules as to guilds, supervision of goods, weights and measures, currency, etc.—in works like the *Artha-Shastra* of Kautilya.

(b) *Trade during Mahomedan Period (1100-1700 A. D.)*

We may next pass under review Indian trade during the Mahomedan Period in which the trans-frontier trade in the North-West assumed a new importance. Delhi and Lahore came into the closest commercial relations with Kabul and Kandahar. Articles of rare value from the farthest East found their way through India to Constantinople which in the Middle Ages became the greatest centre for the distribution of such articles to Europe. From there the products of Egypt, Arabia, Persia and India were distributed throughout Southern and Northern Europe by the Italian cities of Venice and Genoa which reached their height of opulence and architectural splendour at this time, and by the towns of the Hanseatic League, e. g. Bremen and Hamburg which also enjoyed a spell of great prosperity. The Mahomedan Rulers of

India were celebrated for their patronage of art in all its forms and were great builders. Indian artistic goods, therefore, reached a level of excellence and range of variety which they had never reached before. We gather a good impression of the wealth of India at this time from Mr. Moreland's *India at the Death of Akbar*. In this, as in the former period, the exports exceeded the imports in value and the resulting inflow of the precious metals went to support that magnificence of the Imperial Court of which impressive records have been left us by foreign visitors to Delhi. If the prosperity of North India was due to her trade across the land frontier that of South India was due to maritime trade with the East and the West and Vijayanagar, the capital of the Hindu Empire in the South, rivalled Delhi, the capital of the Mogul Empire in the North, in its wealth and splendour. Dr. Vincent Smith calculates from a detailed inventory of the treasure and valuables left by Akbar that they were worth at least 35 crores of Rupees. And of the wealth of Vijayanagar Sewell, the historian of *The Forgotten Empire*, says that after the battle of Talikottah the defeated Hindu princes carried away with them five hundred and fifty elephants laden with gold, diamonds, etc. valued at more than a hundred million sterling.

But although the wealth of the Imperial court was dazzling it is not quite clear what the condition of the masses—agricultural and industrial—was under the Moguls. Descriptions given by contemporary travellers like Bernier would suggest that it was miserable. Possession of land was insecure; the irresponsible officials and revenue-farmers squeezed the peasantry. As for the artisans, they were compelled to work in

Karkhanas (i.e., workshops) attached to the Imperial household; they received a bare subsistence wage. Under these circumstances there was no incentive to produce wealth and low productivity resulted in general poverty.

This picture is perhaps overdrawn. In applying modern ideas about freedom of labour and equitable distribution of wealth to those times we are judging them by a wrong standard. In any case the Moguls, by establishing a strong rule and stable administration, by constructing roads, canals and buildings, and by insisting upon a luxurious and refined court life imparted a new direction, vigour and richness to the production of wealth in India.

(c) *Diversion of Trade to the West.*

But more significant than the invasion and military conquest of India by warlike Mahomedans from Central Asia was the imperceptible encroachment upon Indian trade made by the merchant-adventurers of Western Europe that began since the discovery of the sea-route to India *via* the Cape of Good Hope. This discovery revolutionized the trade routes that hitherto radiated *from* India. India ceased to be the centre of trade and commerce it was in the Eastern Hemisphere for centuries past. Trade now gravitated into the hands of the European merchants and the Indian coast line became a convenient halting place to them in that long chain of oceanic communications that was established between Amsterdam and London on the one hand and China and the East Indies on the other. For more than a century this trade was in the hands of the Dutch, and Amsterdam became what Constantinople had been in the Middle Ages—a great distributing centre for

commodities from India and the East Indies. But soon the Dutch lagged behind and Indian trade fell into the hands of the merchants of the English East India Company and then London took the place of Amsterdam. The diversion of Indian trade to the West along maritime routes and its control by European merchants are events the importance of which cannot be exaggerated in the economic, as well as political, history of our country.

Leaving aside the political consequences of this diversion we shall here indicate the main stages in the development of external trade with England. The following periods may be conveniently distinguished:-

- (i) 1600-1740 :-The era of settlements and factories, mostly along the coast line and the banks of navigable rivers in Bengal, and of peaceful trade.
- (ii) 1740-1765 :-Transitional period. Final discomfiture of the French; acquisition of political power and territories in Bengal; supreme command over the seas.
- (iii) 1765-1813 :-Commerce and territorial expansion go hand in hand. Continuance of the monopoly of the East India Company.
- (iv) 1813-1858 :-Trade with India thrown open to all Englishmen. Political consolidation and commercial expansion.
- (v) 1858-1914 :-Administrative consolidation. Construction of great Public Works like Railways and Canals. Adoption of Free Trade. Growth of external trade.

(a) *Indian Trade under Early British Rule (1600-1813).*

It must be remembered that from the beginning the Mahomedan and Hindu rulers in India appreciated

the advantages to be derived from the trading activities of the English merchants and granted them important concessions, e.g. low customs duties, freedom from inland transit duties, free lands, etc. The English merchants found a new market in Europe for the products of Indian industry. But the general policy of England towards India was inspired by that commercial and colonial system which is briefly described as Mercantilism. The Company was bound to supply to the British Government naval stores, such as hemp, saltpetre, etc. It was bound to export British woollen goods worth £ 100,000 every year. But as the market for these 'woollens' in India was limited, the Company had to send out bullion and this made it extremely unpopular in England, and severe restrictions were imposed upon the bullion to be annually exported. This seriously limited the volume of trade of the Company in India. But when political authority was established in Bengal the lever of growing revenues and expanding territories was used for the extension of commerce. The Court of Directors issued repeated orders to the three Presidencies to encourage the sale of British goods in India. At the same time the growing imports into England of Indian cotton and silk fabrics alarmed the English manufacturers and they persuaded Parliament to impose heavy duties upon the Imports.

The mercantilist policy of England nowhere proved more harmful than in the gradual exclusion of Indian goods from the English markets. This period of high or prohibitive duties lasted from 1797 to 1824. Again the English Navigation Laws were in full operation. English goods were imported into India only in English bottoms; up to 1797 foreign ships except

of those European countries that had settlements in India were altogether excluded from trading with India. Though they were allowed to trade after 1797, customs duties at double the rates were imposed upon them. They were altogether excluded from the coastal trade of the country. The general result of the pursuit of this narrow mercantile policy towards India was a decline in her trade and industry.

(e) Industrial Revolution in England and Indian Trade.

The close of the Napoleonic Wars ushers a new period in the history of English trade with India. There was a general clamour against the commercial monopoly of the E. I. Company, and, accordingly, when its charter was renewed in 1813, its monopoly of Indian trade was abolished. Thenceforward not only could any Englishman trade with India but he might go out there and settle (under a system of license) anywhere in the country. In 1815 the Court of Directors gave additional facilities to English trade with India. Certain British manufactures were allowed to be imported into India duty free, and others at reduced rates. Foreign goods—imported in British or foreign bottoms—were charged a double customs duty. Finally, the export duty on certain commodities, e.g. cotton, indigo, hemp, etc. was refunded if they were destined for England. Thus since 1815 British goods and British shipping received a 'preferential' treatment in India.

Industrial conditions in England were specially favourable for the fullest use being made of the new opportunities. That country had just passed through the 'Industrial Revolution.' The secret of applying steam power to industry was transforming the face of the land. Factories were set up in which large masses

of men, women and children were employed for long hours to tend machinery, to the great cheapening of the articles thus 'manufactured'. This development brought about a radical change in India's trade. Formerly the E. I. Company exported large quantities of Indian cloth to the English and European markets. But this Indian cloth now found a new and vigorous competitor in the machine-made 'cotton-cloth' of Lancashire. In this competition the Indian cloth, being hand-made, was sure to go under in the long run. The result was anticipated, as stated before, by the imposition of high duties on some and the complete exclusion of the remaining kinds of Indian fabrics. These high duties were maintained while the newly-established manufacturing industries were striking deep root in England. The growing manufactures of England required raw materials and Parliament, when it renewed the charter of the E. I. Company in 1833, was not anxious so much for extending the sale of British manufactures in India—for that was an accomplished result—but for getting raw materials for industry and other tropical commodities, e.g. cotton, tobacco, sugar, indigo, tea, coffee, from India. For this purpose Englishmen were allowed to settle more freely in India and acquire land. It was not expected that English colonists would go out to India in the same way in which they went to Canada. But the idea was that Englishmen with capital and skill would go out to India, and exploit the agricultural resources of the country with the help of cheap Indian labour and thus make available better cotton, silk, indigo, tea, etc. for consumption in England. This exploitation would improve the quality and increase the quantity of Indian agricultural products, make England independent of

foreign, and particularly American, supplies, contribute to the prosperity of Indians, add to their purchasing power and thus increase the demand for English manufactures, and finally, augment the revenues of the State.

The Charter Act of 1833 thus gave a new complexion to Indian trade on account of the Industrial Revolution in England. The first result of the Industrial Revolution was the loss of the overseas markets to the products of Indian hand-loom and other handicrafts. The next result was the invasion of the Indian market by the cheap machine-made goods of Manchester. Thirdly, this expanding export trade of England gave rise to a new demand for the raw materials of industry. England was lacking in these raw materials though she had an abundance of the first requisites of modern industries, namely, coal and iron. The raw materials had to be obtained from distant America or from the tropical regions. And finally, when the industrial population of England increased rapidly and its growing efficiency raised its standard of living, an enormous demand ensued for food grains, meat, fruit, dairy products and other articles of direct consumption that had to be got from foreign countries.

(2) NATURE OF THE ECONOMIC TRANSITION IN INDIA. Before we proceed to consider the *external* and *internal* forces that transmitted the effects of the Industrial Revolution in England to India and thus ushered an 'economic transition' in the latter country, let us note the chief points of contrast in the economic organization of countries that have and that have not passed through such a revolution. We may take England as an example of a country industrially

revolutionized and India as an example of a country on the threshold of such a change. Sir Theodore Morison* notes three points of contrast: (a) as to the occupations of the people. In England less than $\frac{1}{10}$ of the people depends upon agriculture; in India nearly $\frac{3}{4}$ of them so depends. (b) As to the distribution of the people between towns and villages. In England three-fourths of the population lives under urban conditions; in India the proportion is approximately ten per cent. (c) Finally, as to the character of the unit of economic life. That unit in England is the town. It is intimately dependent upon the outside world for supplies of food and for the disposal of its manufactures. In India for the vast majority the unit is the village, economically isolated from the rest of the country, and deriving the requisites of a simple standard of living from within itself. Again, a typical English industrial town is a complex organism: production is carried on in factories; there is minute division of labour; the control of industry is in the hands of the 'captains of industry'. A typical Indian village is a simple organism. In it agriculture and the few simple industries are carried on on a tiny scale; there is little scope for technical division of labour or use of capital; and industry is in the hands of craftsmen, each working on his own account.

(3) FACTORS THAT BROUGHT ABOUT THE TRANSITION.—The transition of our country from the older handicraft organization to the modern complex industrial organization is due to two sets of factors: external and internal.

External factors:—Reference has already been made

* Cf. His *Economic Transition in India*.

to the mercantile policy of England towards India up to 1833. Important fiscal reforms were made since that year.

(a) The adoption of cuniform customs tariff by the three Presidencies of Bengal, Bombay and Madras between the years 1836-44. The policy of discrimination against foreign merchandise and foreign shipping had also by this time fallen into disfavour along with the whole system of Mercantilism. The Free Trade Principle had won the day. Fiscal reforms of Huskisson, Peel and Gladstone were taking place in England. Even the Navigation Acts—the bed-rock of English Protectionism—were abolished in 1853 in England. As a result of these reforms, foreign ships were given equal facilities to trade with India and foreign goods also were charged the same customs duties as were levied upon English goods.

As a result of these measures the imports into India increased from 4.97 crores of Rs. in 1834-39 to 15.37 crores in 1854-1859, and the exports from 11 crores to 22.2 crores in the same period.

(b) The accumulation of large stocks of capital in England on account of the increased productivity of English industry. This capital was seeking profitable investment. About the middle of the last century the principle of 'limited liability' came to be recognized by English law and a new impetus was given to the formation of joint-stock companies. Thus the capital available in England was rapidly mobilized for industrial enterprise not only at home but in all parts of the British Empire, and the stream of overseas investments has since then been increasing in volume and extent.

(c) About the same time there was improvement

in oceanic transport. Sailing ships were replaced by steamships. This made voyages as quick as they became safe and regular. Other technical improvements in ship-building rapidly followed one another. The compound-engine economised fuel; the refrigerating chamber, by preserving perishable commodities like meat, fruit, etc. made their transport over long distances possible. As a result of these and other improvements there was a lowering in the freight-charges and a far wider range of commodities than in former times entered into international exchange.

(d) The opening up of the Suez Canal in 1870, submarine cables, telegraphs, and a cheap postal system further facilitated communications between different parts of the Empire. The economic importance of India as a source of raw materials and as a market for finished products began to be appreciated as is evidenced by the holding of a grand International Exhibition a few years later in London.

(e) England was not the only country in Europe that entered upon industrialization in the last century. She had no doubt the advantage of an early start and her vast Indian Dominions added to her strength and resources. But other European countries, e.g. Germany and Italy soon followed suit, with an increasing demand for Indian raw materials and an appreciable appropriation of the Indian market. Later on the United States of America and Japan entered the list.

Internal Factors—Let us now pass on from the external factors to those operating within the country.

(a) Even though the export and import trade of the country was thrown open to all Englishmen in 1813, there was an insuperable obstacle to the growth of that trade on account of numerous taxes and tolls

that were imposed upon the internal transit of goods. The Indian-made cotton fabrics, for instance, had to pay as much as $17\frac{1}{2}$ p. c. in the shape of duties before they were finally placed on the market. On the other hand the cloth imported from Lancashire paid only the nominal customs duty of $2\frac{1}{2}$ p. c. With a view to removing this handicap on Indian industry and also to facilitating the movement of goods all internal duties were done away with about the middle of the last century.

(b) With the removal of these internal barriers to the movement of goods, and as soon as the finances of the country (strained by the Indian Mutiny) permitted of such a reform, a fiscal policy based upon approved Free-Trade principles of the Manchester School came to be adopted for the whole country. By 1875 the import duty was reduced to 5 p. c. and in 1882 it was, with the exception of a few articles, altogether abolished. Similarly the export duty was reduced and imposed upon fewer articles, so that by 1875 only oil seeds, rice, indigo and lac paid a duty of 3 p. c. Even this small duty was abolished by 1880 in the case of all articles except rice. This unflinching pursuit of a Free Trade policy in India at the very time when European countries like Germany and France, the United States of America and even Japan were raising their tariff walls higher and higher should be specially noted.

(c) But what perhaps most contributed to the growth of trade was the construction of railways. The railways have changed the whole face of the country. Dr. MacPhee* thus succinctly summarises the important

* *The Economic Revolution in British West Africa*, p. 126,

part played by railways when they are newly constructed in a country. "Railways affect every aspect of national life. The first effect of railways is the acceleration of transport, whereby distant places are brought near and inaccessible places are rendered accessible. Flowing out of this speeding up of transit there are many other effects. *Economically*, cheap and speedy transport means that a wider area is tapped for supply, that more bulky and less valuable goods can be profitably exported and that the general volume of trade is increased. *Politically*, speedy and efficient transport means that troops and stores can be moved more readily, and, therefore, troops can be reduced in numbers with a simultaneous diminution in costs, that outbreaks and rebellions can be more easily and expeditiously quelled, that officials can supervise a greater area, that, therefore, their numbers and expenses can be decreased, that officials' health and lives can be better safeguarded, and that the resultant diminished cost of policing and administration allows of greater expenditure on such positive public works as roads, railways, harbours, hospitals, housing and schools. *Socially*, cheap and speedy transport means the substitution of the region for the village as the unit, the breaking down of the barriers of tribe, clan and religion and thereby the extension of commerce and civilization". What railways have done in British West Africa they are doing on a larger scale in British India.

In connection with the construction and operation of Indian railways, however, two points must be noted, viz., the alignment of railways and the policy of fixing railway rates. Both encouraged *external* trade at the cost of the *internal* trade. The master-mind of Lord

Dalhousie linked the interior of each province to some convenient port on the coast, either Bombay, Calcutta or Madras. Food grains and raw materials were easily carried to the ports and thence shipped off to Europe. As regards railway rates official Committees like the Acworth Committee on Indian Railways admit that the rates somehow had the result of encouraging the export of raw materials and the import of manufactured articles while they did not offer equal facilities for the movement of goods from one part to another *within* the country.

(d) Among other measures that made for trade expansion we may mention (I) the introduction of a uniform rupee coinage throughout the country in 1835, and of Government Paper Currency in 1862. We may refer here incidentally to the exchange policy of the Government leading to the closing of the Indian Mints to the private coinage of silver and the eventual adoption of the Gold Exchange Standard. (II) The enactment of uniform Codes bearing upon divers commercial and business transactions. (III) The establishment of a stable form of administration and the enforcement of law and order.

(4) THE EFFECTS OF THESE FACTORS UPON INDIAN TRADE—(a) The operation of these external and internal factors had the result of enormously increasing the *volume* of the external trade of the country. The total average annual value of this trade (in private merchandise) was $87\frac{1}{2}$ crores in the quinquennial period 1864-65 to 1868-69. It was 427 crores in the year 1913-14. The *nominal* value of this trade was $653\frac{1}{2}$ crores in 1924-25, but we must take into account the rise in prices since the War.

(b) A second effect is change in the *composition* of

this trade. Before the English Industrial Revolution India exported mostly *valuable* and *finished* articles. Since then the exports consist of bulky or heavy agricultural and mineral raw materials, food grains, tea, etc. Only a fractional proportion is made up of manufactured goods—mostly cotton textiles. The imports, on the other hand, are mostly manufactured articles. The detailed composition of the trade will be considered in the next chapter.

(c) A third result has been the growth of this trade at the expense of the *internal* or *domestic* trade of the country. The trans-frontier land trade and the coastal trade also have not received the attention they deserve on account of their importance and future possibilities.

(d) A fourth result is the *dispersion* of the external trade over the greater part of the world. In the beginning of the trade it was mostly in British hands. In 1854-55, for instance, the United Kingdom supplied nearly 76 p. c. of the Indian imports and absorbed a similar proportion of Indian exports. Since then the general tendency has been—at any rate up to the outbreak of the Great War—towards the diversion of this trade from the United Kingdom to the European Continent, the United States and Japan. Thus as to *imports*, the share of the United Kingdom declined from 76 p.c. to 64 p.c. with a corresponding rise in those from Germany and Japan. As to *exports*, the decline was striking, the United Kingdom taking only 23·4 p.c., Germany, Japan and the United States taking among them 28·7 p.c. at the outbreak of the War.

The causes of this diversion are not far to seek. The monopoly of the United Kingdom as the distributor of Indian commodities in the European and

American markets was gone when the European countries, particularly Germany, began to have *direct* trade with India. Their vessels began to visit the Indian ports and these countries also established their own agencies in this country, as much for the collection of Indian raw materials required for their expanding industries as for the distribution of their own manufactures in the Indian market. They thus began to retain in their own hands the profits which were formerly appropriated by Englishmen as carriers of and middlemen in this trade. In the establishment of these trade relations these foreign countries received important facilities from their own Governments, from their consular establishments in India, and even from the Indian Government which followed a Free Trade policy and made valuable concessions to these foreign merchants as a price for similar concessions or facilities that were secured for *British* trade in *other* parts of the world. These countries also established their own banks in India as hand-maids to their growing commerce.

Perhaps the most thorough-going methods adopted for this purpose were those of Germany. She greatly increased her shipping engaged in Indian trade; she had a well-organized consular establishment; she also had created important banking interests in the country. Her agents made careful study of the exact requirements of the Indian masses, manufactured articles that appealed to their taste and were within their slender means. They offered attractive shipping and credit facilities to the Indian merchants that had dealings with them in the export or import trade. As a result of this fierce European and Japanese competition (for Japan copied her methods from

Germany) a sensible impression was made upon the dominant position of the United Kingdom in the *import* trade of the country while in the *export* trade that country actually lost a good deal of ground.

The effects of the Great War upon the distribution of trade will be considered in the next chapter.

(c) An interesting feature of India's external trade is that whereas the imports mostly come from Europe and America, a considerable part of the exports is destined for Asiatic ports, Europe taking only 55 p.c. and America, Africa and Australia taking about 12, 3 and 2 per cent respectively.

(5) FURTHER CONSEQUENCES UPON NATIONAL ECONOMY.

We shall next study the further consequences of imports and exports upon the country's industries, agriculture and population.

Effects of Imports—The imported articles roughly fall into two classes: consumer's goods and producer's goods and they affect the people differently according as they belong to one or the other class.

Consumer's goods—The most important kinds of goods under this head are: cotton piece-goods, hosiery, silk and woollen goods; galvanised sheets; other building materials; hardware, *e. g.*, enamelled iron-ware, metal lamps, etc.; cutlery; motor cars and bicycles; sugar; kerosene oil; provisions; drugs and medicines; liquors; salt; glass and glassware; aniline dyes; tobacco; precious stones; matches. These articles are not consumed to the same extent by the different classes of society and some are meant only for the rich. But whether the rich or the poor consume them it must be admitted that they add to the necessities, conveniences, and comforts (and in a few cases, to the

luxuries) of life. That they have appreciably raised the standard of living of the Indian masses is equally clear. As the Indian Industrial Commission puts it:* "Vessels and implements of iron, brass and copper are now commonly used in the villages, and their price is within the reach of all classes. Petty articles of domestic use or personal ornament, such as scissors, mirrors, bangles, etc. and the thousand and one glittering trifles with which the rural huckster decks his stall, have poured in from abroad. Drugs and patent medicines of all kinds—Indian and foreign—command a ready sale. Sewing machines are found nearly everywhere, and bicycles are in ever-increasing demand. The enormously extended use of cotton cloth—especially of the finer counts,—of woollen clothing, the introduction of kerosene oil and matches, collapsible umbrellas and of better and cheaper cutlery and soap have added appreciably to the comfort of the people."

But though the people have benefited as *consumers*, some sections, *e. g.*, the artisans who were formerly employed in producing kindred articles in the country have suffered much more than what they have gained, on account of competition with cheap imports. Among those that have suffered most we may mention the weavers, the oil-pressers, the dyers, the bangle-makers, the leather workers, etc.

These artisans fared differently according as they were town-dwellers or villagers. The urban artisans had better opportunities of finding new employment in the growing towns. They were also less conservative, less illiterate, and less caste-ridden than the village artisans. Among the

* *Report*, p. 7.

latter the distress inseparable from the process of economic transition has been most acute. When we remember that the rural population represents $\frac{9}{10}$ of the whole population the magnitude of distress becomes apparent. The village artisans and menials—whether members of the Village Community or not—followed their traditional occupations for which they received customary remuneration. This characteristic self-sufficiency of Indian villages is being gradually destroyed by cheap imported or locally-manufactured articles. The village artisans are being thrown out of employment. Extreme illiteracy, rigid caste rules and abject poverty prevent them from finding out new employments the scope for which, in any case, is most limited in the villages. Some that were enterprising enough migrated to the town for temporary or permanent employment; a fortunate few managed to raise themselves to the status of cultivators of land, either as petty proprietors or tenants. But most became landless labourers. In one way or another, therefore, they fell back upon land as their chief or only means of occupation. This concentration of the population upon land is producing the most far-reaching effects upon rural economy such as competition for land and rise in rentals, rise in land values, sub-division of land, growing indebtedness. We shall deal with these problems in the ninth chapter.

We may next take the *producer's goods*. Here we have: cotton yarn; raw wool and silk; convenient bars and sections of iron and steel; machinery and mill work; railway plant and rolling stock; tools and agricultural implements; motor lorries; chemicals; paper and paste-board; instruments and apparatus; coal.

These goods also have affected differently different sections of the people. Some artisans, *e. g.*, the weavers (that have survived the competition), the metal workers, the blacksmiths, etc. now get the advantage of having better material to work with or upon. Other artisans, *e. g.*, the carpenters, the masons, the blacksmiths, etc. have furnished themselves with better tools ; agriculture has improved as a result of better implements ; but those artisans who were too poor or conservative to adopt these new and improved materials or methods have gone to the wall.

Again the growing imports of certain kinds of machinery, *e. g.*, oil-crushing machinery, rice and flour mills, saw mills, sugar machinery, cotton mills, etc. have thrown out of employment those who formerly used to do those things by manual labour and with primitive implements.

Improvements in the means of transport, *e. g.*, railways, tram cars, motor cars, buses and lorries have seriously affected those who used to ply this trade with older forms of conveyance, such as, bullock carts, tongas, palanquins.

On the other hand so far as the imported machinery has given rise to *new* industries or greatly extended the scale of old industries, it has provided employment to workers, *e. g.*, the railways, workshops, mining, cotton and jute textiles, sewing and knitting machines, printing presses.

Finally, a considerable proportion of imported articles represents stores purchased by Government. They have been utilized for equipping the country with the frame-work of modern civilized life, *e. g.*, railways, roads, bridges, buildings, canals, post and telegraphs, etc. The construction of these Public

Works afforded a new opening for employment to thousands of labourers—skilled as well as unskilled. But for this source of employment the hardships of transition would have been simply unbearable. It is a part of the declared policy of Government to undertake such works as a measure of relief in times of acute distress.

We may say, in a general way, that the *urban* artisans are either (a) pursuing, in a very few cases, their old crafts with better materials or tools and under work-shop conditions; or (b) they have given up their old crafts and adopted new ones; or (c) to a small extent they have been absorbed in the newly-established large-scale industries; or (d) found new opportunities of employment; or (e) — and this is the most numerous class, they have gone to swell the numbers of the unemployed in the urban proletariat.

It will be noted that the Industrial Revolution in England has affected the Indian population in a manner quite different from that in which it affected the English population. In England also there was distress among the artisans during the period of transition, no doubt. But there the period was short, and the displaced artisans found ready employment in the growing manufacturing industries which also attracted large numbers of agricultural labourers. Those who were particularly hardpressed found relief in emigration to the four corners of the world. The rise of Capitalism or Industrialism, therefore, in England led to *rural depopulation* and decay of handicrafts. In India the handicrafts are dying out equally rapidly. But the displaced artisans are not being absorbed in the few forms of new industry, nor have they any scope for emigration. The population is, therefore,

crowding upon land, and the tendency of migration to the towns is very limited. Thus while in England the decline of cottage industries was due to capitalism *within* the country, in India that decline is mainly due to the progress of capitalism *outside* the country, and only to a small extent due to progress *within* the country. As will be shown in the tenth chapter, what progress Industrialism has made in India is *small* in extent, *unstable* in character, and *European* in direction, management, control and finance.

Effects of Exports:—The exports consist of food grains and raw materials furnished by various extractive industries, *viz.*, agriculture, mining and forestry, and, to a small extent, of manufactured articles. The important articles are: cotton and cotton manufactures, jute and jute manufactures, food grains, tea, coffee, oil-seeds, hides and skins, indigo, lac, opium, timber, rubber.

(a) *Effect on Agriculture*—The railways by knitting together the various parts of the country created markets for the sale of surplus produce and brought about a levelling up of prices. The effect of this change was the partial substitution of 'exchange culture' for 'subsistence culture'. This substitution was specially marked in the 'commercial' crops of the country, *i. e.*, those that had a ready export market. Better prices induced the cultivators to grow these crops and depend upon the market for the food grains required for their own use. We may call this 'commercialization' of agriculture. This process has brought in its train other results also. One result has been the specialization in, and localization of, crops. A cultivator, instead of growing all manner of crops for his own consumption, would now 'specialize' in one or two for

which he found his land suitable, *e.g.*, cotton, jute, sugarcane. When a large number of cultivators in a tract begin to grow the same crop, it is 'localized'. Thus we have cotton in Berar and Khandesh, sugarcane along the canals in the Poona District, wheat along the canals in the Punjab, ground nut in Madras. A second result of commercialization has been the substitution of 'non-food', *i.e.*, commercial crops for food grains. In this connection we may refer to the remarkable increase, in recent years, in the area under cotton, jute, oil seeds, particularly ground nut, tobacco. It must also be remembered that tea, coffee, tobacco, potato and, in another category, the rubber and cinchona plants—are of more or less recent introduction into India. A third result has been the increased production of agricultural commodities due to extension of cultivation, extension of irrigation, improved methods of tillage, etc. And a fourth result has been a rise in agricultural wages. More will be said about these in the eighth chapter.

The extent of commercialization can be seen from the following table :

Percentage of exports of certain principal crops to total Production.

Crop	Pre-War average	War average	Post-War average	1924-25	1925-26
Rice	9	5	5	7	8
Wheat	14	9	3	13	3
Tea	96	89	95	91	90
Cotton-raw ...	56	51	61	55	69
Jute-raw... ..	51	31	48	48	46
Linseed	73	63	59	69	77
Rape & mustard	23	8	19	23	13
Sesumum	25	8	6	6	10
Ground-nut ...	35	12	19	27	24
Indigo	40	44	27	16	7

(b) The large export trade has also profoundly affected the *organization of marketing*. In the era of 'subsistence culture' there were few middlemen and fewer markets. Railways and steamships created internal and external markets and a new class of middlemen came into prominence. The village *bania* had special facilities for being a middleman between the petty cultivator and the large European (or, in a few cases, Indian) export trader. The *bania* was already financing the cultivator and his dual capacity as a money-lender and grain-dealer gave him a new place in the rural organization of the country. In the marketing of export crops particularly, the European firms hold a strong position, for on them depend not only the Indian middlemen for their small margin of profits but the large class of cultivators for the prices that the firms are prepared to offer. These firms have international connections and their readiness to buy in the Indian market entirely depends upon the prices that prevail in the markets of Europe and America.

(c) This last point brings into prominence another feature of the marketing organization, its *sensitive dependence* upon prices in other centres of international trade. Quotations of prices of international commodities prevailing in New York, Liverpool, London are daily received at Bombay, Karachi and Calcutta and thence they are telegraphed upcountry and prices in the mofussil bazars move in sympathy with these quotations.

(d) The export trade has also called into existence a *large number of minor industries* connected with the preparation of the commodities for export, *e.g.*, ginning and pressing factories for cotton; pressing factories for raw jute; polishing mills for rice; crushing mills

for seeds; factories for tea; tanneries for the preparation of crude leather.

(e) Again, considerable trade has developed in the *export of forest, plant and mineral products, e. g., timber, lac, myrabolums, rubber etc.; and manganese ore, wolfram, mica, gold, etc.*

(f) Finally, the import and export trade together have created a *complicated system for the financing* of that trade and the industries depending upon it.

There is a net-work of Banks—the Imperial Bank of India, the Exchange Banks and the Joint Stock Banks. And then there are the large “agency firms” which, except in the case of Bombay, are mainly European. “In addition to participating in the export and import trade, they finance and manage industrial ventures all over the country and often have several branches in the large towns. The importance of these agency houses may be gauged from the fact that they control the majority of the cotton, jute and other mills, as well as of the tea gardens and the coal mines. This system originated and has still continued owing to the ability of these houses to furnish financial help to industries; it also owes its existence to some extent to the difficulty, in the case of companies under European control, of finding among the relatively small class of leading men of business available in India directors, especially managing directors, who will remain in the country long enough to guarantee the continuous supervision requisite for the successful conduct of such business. An “agency firm” as a rule comprises several partners, some of whom are taking their turn of duty in India, while others attend to the firm’s affairs in London or elsewhere”.* It must also

* Indian Industrial Commission Report, p. 9.

be remembered that the capital required for the construction of railways and irrigation canals has been raised in England by private companies or by Government. An important result of the import and export trade has been the investment of "external capital" in the country.

It is now recognised that foreign investments have a determining effect upon the character and direction of the external trade of a country. While the process of investment is going on it *adds* to the imports of the country, particularly the imports of producer's goods. When the investment is over and interest charges and repayment of loans fall due, they are paid in the form of *exports* of commodities. India has been a borrowing country ever since modern industries were started here by foreign merchants. It is not easy to ascertain the total amount of foreign, *i.e.* mostly British, capital that it invested in this country. So far as Public Works like railways and irrigation canals are concerned, some idea of the Public Debt of the Central Government *held in England* (which also includes some unproductive debt) will be formed from the fact that at the end of 1924-25 it stood at 341 million pounds.* Interest on this large amount has to be paid. There are many other items of debits: dividends and profits on private undertakings financed by British capital; payments of freight and insurance charges; banking commission; boarding charges of Indian students and other Indians residing in England. Then there are the remittances of 'savings' made by British officials and non-officials in India. Finally, there are the payments the Indian Government has

* *Statistical Abstract (Fourth Issue)*. p. 197.

to make in England for pensions, furlough allowances, and army and marine charges. These latter are included in the 'Home charges'. These debits are paid by the export of commodities. Hence results the peculiarity of the international trade balance of India—a great excess of exports over imports. "This excess is to be attributed to the heavy interest charges on foreign capital investments and to political expenses incident to the Government of India".* This excess is indeed so great that after paying for all these 'invisible' debits, there is still left due to India a net favourable balance payable in gold.

We shall study in greater detail some of these consequences of India's external trade upon national economy in subsequent chapters of this book.

* *The International Trade Balance*, By Dr. T. H. Boggs, p. 171.

CHAPTER IV

THE GREAT WAR : ITS CONSEQUENCES AND LESSONS

(1) INTRODUCTORY—In the preceding chapter we dealt with the economic transition that is taking place in the country as a result of India's growing trade with foreign countries. This trade met with many vicissitudes during the Great European War. Most of the economic problems with which our country—and for the matter of that, the whole world—is at present confronted have directly arisen out of the War. A study at this stage, therefore, of the main effects of the War upon Indian trade would not only be appropriate as a continuation of the subject matter of the last chapter, but it would also be an excellent introduction to the larger problems—agricultural, industrial and monetary—to an analysis of which the rest of the book is devoted. Indeed, just as the sea-borne trade of India supplied the key to the pre-war economic history of the country, the great European Struggle, in essence a struggle for economic supremacy, supplies the key to the post-war problems of the country.

(2) EARLIER EFFECTS OF THE WAR UPON INDIAN TRADE—We should distinguish between the actual War period (1914-1919) and the subsequent period of reconstruction and slow recovery (1922-26).

The first effect of the War was a *sudden reduction* in the volume of this trade. This was due to many

causes. (a) The markets of the hostile countries of Central Europe were closed to Indian exports and also no imports could be got from them. (b) Other Continental Countries, *e.g.*, France and Belgium were turned into theatres of War and all trade and industry in them came to a standstill. (c) In the belligerent countries of Europe, and to a less extent in the neutral countries, the exigencies of War finance led to an unprecedented inflation of the local currencies. This led to a complete dislocation of the exchanges and the resulting difficulties of international trade. (d) The Indian Government imposed restrictions upon the export of such commodities as were likely to be serviceable for War purposes lest they should find their way to the hostile countries through the neutral countries. (e) But the determining factor was the shortage of shipping. India wholly depended upon British and foreign shipping for her sea-borne trade. During the five years preceding the War roughly 4250 vessels (above 1000 tons) with an aggregate tonnage of 8,110 thousands were engaged in this trade. Of these 625 with a tonnage of 1,725 thousands were foreign—mostly German and Austro-Hungarian, with a few from Japan, Holland, Norway and Italy. Foreign vessels of hostile countries were altogether eliminated during the War and those of other European countries greatly reduced in number. British ships were diverted to war purposes. Japan and the U. S. A. increased their shipping engaged in Indian trade. But on the whole the scarcity of shipping and the rise in freight rates and insurance charges greatly reduced India's external trade.

The extent of reduction can be seen from the following table.

TABLE

Export and Import of commodities on private account, in crores of Rs.

Year	Exports	Imports	Net Exports
1909—14	224·21	145·85	78·36
1914—15	181·59	137·93	43·66
1915—16	197·38	131·99	65·39
1916—17	245·15	149·62	95·53
1917—18	242·56	150·42	92·14
1918—19	253·85	169·03	84·82
1919—20	326·79	200·80	125·99
1920—21	258·05	335·60	-77·55
1921—22	245·44	266·34	-20·90
1922—23	314·32	224·31	90·01
1923—24	361·91	217·03	144·88
1924—25	398·36	243·18	155·18
1925—26	385·33	224·20	161·13

We must be cautious in drawing inferences from the foregoing table as to the volume of trade. On account of war-time inflation of currency there was an abnormal rise in internal prices so that though the *nominal* figures for imports and exports exceed the

pre-war figures from 1916-17 onwards, this excess is *not real*. If we reduce (with the help of index numbers of prices) the declared values of imports and exports in subsequent years to the values obtaining in 1913-14 we get the following table.*

TABLE

Value of Export and Import trade in merchandise on private account in terms of values in the year 1913-1914. (Crores of Rs.)

	1913-14	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26
Imports :	183	101	142	124	138	120	137	143
Exports :	244	198	172	182	214	240	250	246
Total excluding reexports	427	299	314	306	352	360	387	389

The figures show that the exports during the last three years have regained their pre-war *volume*, but that the imports have yet considerable leeway to make up.

(3) REVIVAL OF TRADE—The table also shows that the revival of external trade really begins from the year 1922-23. Let us state some of the favourable factors that account for this revival. The most important, of course, is reform and stabilization of European currencies. When we remember that nearly 50 p.c. of our exports go to Europe and that 70 p.c. of our imports come from that Continent the importance of monetary reform in Europe becomes obvious. The

* *Review of Trade of India : 1925-26*, p. 2.

European countries were all suffering from inflated currencies. In many the paper-currencies had reached such low depths of depreciation that it appeared at one time that they would never be able to extricate themselves from the quagmire. As soon as the War was over, therefore, the most urgent problem to which European financiers and monetary experts addressed themselves was the reform of currencies. They held a Conference at Brussels but it led to no practical results. The situation was at its worst in 1922-23. "By the end of 1922 most of the currencies of Europe were well away on the glissade toward utter demoralization and those of Austria, Hungary, Russia and Germany were completely out of control."* The League of Nations addressed itself to the task of currency reform. A second Conference of financial experts was held under its auspices at Genoa in 1922. It went further and actively participated in the reform of Austrian and Hungarian currencies. In the case of Germany the problem was complicated by the huge payments that she had to make to the Allies by way of Reparations. The scheme of Reparations drawn up by the Dawes Committee was finally accepted by the parties concerned in August 1924. The solution of the Reparations problem immediately facilitated the reform of German currency and that country now entered upon a vigorous expansion of its external trade.

An important landmark in the currency reconstruction of Europe is furnished by the return of the United Kingdom to the Gold Standard in April 1925. America never departed from that standard throughout

* *Review of Trade in India : 1925-1926*, p. 2.

the War. With the United States of America and the United Kingdom firmly anchored to the Gold Standard with the pre-war parities, monetary stabilization became possible in the case of other countries. We may classify the European countries according to the present state of their currencies. In one group we have got England, Sweden, Holland and Switzerland that have established the gold standard with *pre-war* parity. In another group we have Austria, Hungary and Germany that have, with external help, established gold currencies with *new* parities. In a third group we have Finland, Lithuania, Esthonia, Czechoslovakia and Poland where stability has been established at *new* parities without any external assistance. In the fourth group we have the remaining countries which have not been able to break away from paper currencies unrelated to gold and the currencies of some are in a precarious condition.

The general improvement in the financial and political condition of Europe is reflected in the growing share which the countries of Central Europe are taking in Indian trade. The foreign shipping engaged in that trade in the post-war period (1919-20 to 1923-24) was only 551 vessels with a tonnage of 1,624 thousands. In 1924-25 and 1925-1926 it was 720 and 698 vessels respectively with a tonnage of 2,350 thousand. The vessels of Holland, Italy, Germany are increasing in number. This is an indication that the European countries have very nearly resumed their normal industrial and commercial activities.

(4) POST-WAR DIVERSION OF INDIAN TRADE—But though Indian trade is recovering its former *volume*, important changes are taking place in its distribution. We saw in the last chapter that there was a distinct

tendency on the part of Indian trade to divert from the United Kingdom to European countries before the War. In the course of that War the United Kingdom reappropriated a very large proportion of the Indian *exports*. Preoccupation with the prosecution of the War prevented her from increasing her share in the Indian *imports*. Here the United States of America and Japan did their best to occupy the place in the Indian markets from which the European countries including the United Kingdom were dislodged while the War was going on. With the termination of the War the United Kingdom lost her control over the *exports*, and even in the *import* trade, the Central European Countries are reconquering their lost ground with such rapidity that even the United States and Japan are finding it difficult to hold their own in this post-war competition.

This is clearly brought out by the following table showing the distribution of Indian trade in the period 1909-1926.

Country	Pre-War Average		War Average		Post-War Average		1924-25		1925-26	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
United Kingdom ...	62.8	25.1	56.5	31.1	57.6	24.2	54.1	25.5	51.4	21.0
Total British Emp.	69.7	41.1	65.4	51.7	65.2	41.4	62.2	38.7	59.1	35.2
Foreign Countries.										
Japan ...	2.5	7.5	10.4	11.2	6.9	13.3	6.9	14.3	8.0	15.0
U. S. A. ...	3.1	7.5	7.0	11.9	8.5	12.0	5.7	8.8	6.7	10.4
Java ...	6.4	1.3	7.8	1.1	6.8	1.0	6.3	.7	6.2	1.2
France ...	1.5	6.6	1.3	4.5	.9	4.8	1.0	5.3	1.4	5.5
Italy ...	1.0	3.2	1.2	3.9	1.0	3.2	1.6	5.9	1.9	5.0
Belgium ...	1.9	5.3	.3	.5	1.8	3.7	2.7	3.9	2.7	3.2
Germany ...	6.4	9.8	.7	.9	2.8	4.9	6.3	7.1	5.9	7.0
Total (all Foreign)...	30.3	58.9	34.6	48.3	34.8	58.6	37.8	61.3	40.9	64.8

It is obvious from the table that during the War the *export trade* of India to the United Kingdom increased from 25 p.c. in 1909-14 to 31 p.c. in 1914-19, and to the other parts of the British Empire from 17 p.c. to 21 p.c. in the corresponding periods. The export trade to the other foreign countries fell from 27 p.c. to 20 p.c. in the same periods, that to Japan increasing from 7 p.c. to 10 p.c. and to the United States from 7 p.c. to 12 p.c. But in the post-war period the share of the United Kingdom and the British Empire is steadily declining and in 1925-26 it was only 21 p.c., and 35.2 p.c. respectively, that is, appreciably *less* than their pre-war share. The share of Japan is steadily increasing and in 1925-26 it was *double* its pre-war share. The share of the United States is slightly declining during the last three years, though it is fifty per cent higher than the pre-war share. Italy has already exceeded her pre-war share, and France, Belgium and Germany are recovering their pre-war share.

In the *import* trade the change is even more striking. In the pre-war period the share of the United Kingdom was 62.8 p.c. It fell to 56.5 p.c. in the War period, and with the revival of European competition it further fell to 51.4 in 1925-1926. The share of Japan is steadily increasing, and it is much in excess of her pre-war average. The share of the U. S. A. has remained steady and is twice as large as her pre-war share. France, Belgium and Germany are slowly recovering their pre-war average.

(5) TRADE OF INDIA IN 1925-26—Perhaps the best way of showing the present position of India's sea-borne trade—as to its composition, distribution and tendencies—would be to analyse the figures for the

latest year for which they are available, *viz.* 1925-1926.

The following tables give the quantity and value of the principal Imports and Exports for the year 1925-26. In the next two tables the share taken by the principal countries of the world in that trade is given.

Quantity and Value of Principal Articles of *Import*, for the year 1925-26.

	Thousands of Rs.	Thousands of Rs.
Total, Cotton		69,31,26
Piece goods, grey	21,88,72	
„ white	15,99,32	
„ coloured	15,92,12	
Twist and yarn	7,76,67	
Hosiery	1,40,46	
Raw Cotton	3,64,48	
Total, Metals		25,37,45
Iron & Steel	18,06,97	
Copper & Copper Manuf.	1,83,10	
Sugar		15,83,36
Machinery and Mill Work		14,88,59
Oils		10,73,56
Kerosene Oils	5,16,77	
Mineral „	4,88,34	
Vehicles		5,74,89
Cycles	1,01,25	
Motor cars	2,82,26	
Hardware		5,19,57
Railway Plant & Rolling Stock		4,99,54
Carriages & Wagons	2,81,55	
Locomotives	1,11,43	
Wool, Total		4,66,96
Woollen Manuf.	2,92,27	
Provisions & Oilman Stores		4,51,35
Silk, Total		3,74,70
Silk Manuf.	2,11,62	

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Quantity and Value of Principal Articles of *Import*,
for the year 1925-1926. (*Contd.*)

		Thousands of Rs
Instruments & Apparatus ...		3,53,83
Electrical ...	2,25,10	
Liquors ...		3,33,75
Spirit ...	2,19,29	
Spices ...		3,28,01
Paper & Paste Board ...		2,81,05
Glass and Glassware ...		2,59,45
Bangles ...	1,01,04	
Rubber, raw and manuf. ...		2,17,72
Tobacco ...		2,13,35
Cigarettes ...	1,58,82	
Chemicals ...		2,02,53
Drugs & Medicines ...		1,83,55
Dyes ...		1,82,17
Apparel ...		1,65,61
Fruits (dried), etc. ...		1,57,00
Soap ...		1,46,11
Paints & Materials ...		1,29,77
Precious Stones & Pearls (unset)		1,24,03
Building and Engineering		
Materials ...		1,19,08
Haberdashery & Millinery ...		1,09,99
Salt ...		1,04,20
Articles imported by post ...		3,48,79
Total Value of Imports		Rs. 226,17,57

Quantity & Value of Principal Articles of *Exports*
1925-26,

			In 000 Rs.	In 000 Rs.
Cotton, Total	...	...		104,64,13
Raw Cotton	...	...	94,99,28	
Manufactures	...	...	6,12,13	
Jute, Total	...	...		96,78,56
Raw Jute	...	...	37,94,57	
Gunny bags	...	...	26,72,14	
Gunny cloth	...	...	31,79,99	
Grain, pulse, etc.	...	...		48,03,39
Rice	...	...	39,97,21	
Wheat	...	...	3,60,25	
Wheat flour	...	...	1,56,20	
Pulse	...	...	2,09,16	
Seeds	...	...		29,63,68
Linseed	...	...	8,08,53	
Ground nut	...	...	12,02,33	
Rapeseed	...	...	2,68,02	
Sesumum	...	...	1,17,34	
Castor	...	...	2,67,69	
Cotton	...	...	2,18,11	
Tea	...	...		27,12,17
Hides & Skins	...	...		7,23,38
Leather	...	...		7,10,21
Lac	...	...		6,90,10
Metals & Metal Manuf.	...	...		4,92,81
Wool, Total	...	...		4,59,48
Raw Wool	...	...	3,79,88	
Rubber, raw	...	...		2,94,10
Ores	...	...		2,36,02
Manganese	...	...	1,54,36	
Oil Cake	...	...		2,10,62
Wood & Timber	...	...		1,95,74
Opium	...	...		1,93,37
Coffee	...	...		1,85,26

Quantity and Value of Principal Articles of *Exports*
1925-26. (*Contd.*).

	In 000 Rs.
Oils	1,79,27
Spices	1,76,28
Paraffin Wax	1,59,45
Raw Hemp	1,59,17
Dyeing & Tanning substances	1,33,11
Fodder	1,28,58
Manures	1,17,49
Tobacco	1,11,40
Coir	1,08,27
Mica	1,04,17
Articles exported by post	2,71,18
Total Exports	Rs. 374,84,21

% Share of Principal Countries in the *Imports* of India
1925-1926.

	1913-14	1924-25	1925-1926	
Iron and Steel	69.9	63.0	67.7	U. Kingdom
	14.5	7.7	6.4	Germany
	11.5	19.6	15.6	Belgium
	2.6	3.6	4.5	U. S. A.
Machinery	89.8	84.1	79.7	U. Kingdom
	3.3	9.5	9.5	U. S. A.
	5.6	3.5	9.5	Germany
Hardware	57.2	40.1	38.1	U. Kingdom
	9.7	15.6	15.6	U. S. A.
	18.2	26.9	27.5	Germany
	1.5	5.4	7.1	Japan

% Share of Principal Countries in the Imports of India
1925-1926. (Contd).

	1913-14	1924-25	1925-26	
Motor Cars, etc.	71.3	29.3	27.6	U. Kingdom
	15.1	35.5	36.6	U. S. A.
	4.5	1.2	.3	Belgium
	4.5	1.9	2.6	France
	—	3.1	6.7	Italy
	—	27.1	24.8	Canada
Instruments	75.3	65.6	62.8	U. Kingdom
	8.0	11.6	12.7	U. S. A.
	8.2	14.2	13.3	Germany
	2.2	2.0	2.4	Italy
Cotton Manufacture	90.1	80.5	74.6	U. Kingdom
	1.8	13.8	19.0	Japan
	1.5	1.0	1.1	Italy
	1.6	1.2	1.8	Netherlands
Silk Manufacture	46.8	47.7	46.1	Japan
	7.8	2.4	2.9	France
	6.1	10.5	4.2	Italy
	9.0	3.5	3.6	U. Kingdom
	20.6	28.6	36.9	China
Sugar	71.8	73.9	87.5	Java
	16.9	17.4	3.1	Mauritius
Liquors	62.9	59.4	59.3	U. Kingdom
	10.7	11.0	10.5	Germany
	18.8	18.0	18.4	France

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% Share of Principal Countries in the *Imports* of India 1925-1926. (*Contd.*).

	1913-14	1924-25	1925-26	
Mineral Oils	56.1	59.9	55.4	U. S. A.
	3.7	16.1	14.5	Persia
	21.8	11.3	14.6	Borneo
Paper	56.0	42.9	41.6	U. Kingdom
	17.0	21.1	12.1	Germany
	2.5	7.4	8.9	Netherlands
	5.0	8.9	8.9	Norway
	3.1	4.6	7.1	Sweden

% Share taken by Principal Countries in India's *Exports* 1925-26

	1913-14	1924-25	1925-26	
Tea	72.4	89.2	87.6	U. Kingdom
	4.3	2.5	2.1	Canada
	1.2	1.9	1.9	Persia, Arabia
	3.0	1.0	1.5	Australia
Jute (raw)	38.0	24.8	27.9	U. Kingdom
	11.9	8.5	10.2	U. S. A.
	21.8	27.4	21.5	Germany
	9.9	11.7	14.0	France
	5.5	7.2	7.7	Italy
	.5	6.7	4.9	Belgium

% Share taken by Principal Countries in India's *Exports*
1925-26. (*Contd.*)

	1913-14	1924-25	1925-26	
Jute (Manuf.)	6.3 10.6 41.5 10.4	6.6 10.4 37.4 9.1	6.5 9.7 37.5 9.0	U. Kingdom Australia U. S. A. Argentina
Cotton (raw)	3.5 14.6 7.7 47.2 10.3 1.7	5.0 4.9 14.8 50.3 6.0 8.5	5.7 5.2 10.8 50.0 5.9 13.0	U. Kingdom Germany Italy Japan Belgium China
Oil Seeds	22.2 16.0 31.4 5.0 16.0 1.0	24.1 7.4 27.8 14.7 6.8 7.8	22.5 9.2 27.5 12.6 5.0 7.3	U. Kingdom Germany France Italy Belgium Netherlands
Food Grains	26.7 11.5 7.8 3.8 6.7	25.8 11.8 12.9 6.1 5.4	7.4 16.5 12.4 9.3 7.3	U. Kingdom Ceylon Germany Japan Straits Settlement
Raw Hides & Skins	25.9 24.3 20.3 5.3	47.5 18.2 12.6 5.3	45.2 24.3 9.2 5.1	U. Kingdom U. S. A. Germany Italy

Import Trade—Cotton Goods—In the cotton twist and yarn trade the U. K. supplied 86 p.c. and Japan 2 p.c. in 1913-1914; the respective proportions were 31 and 65 p.c. in 1925-1926. Japan also increased her share to 20 p.c. in grey and coloured piece-goods. In *woollen goods*, Japan, France, Belgium and Italy increased their share but the U. K.'s share declined. *Silk goods*—84 p.c. of the supplies come from Japan and China. The imports of artificial silk are steadily increasing because of its growing use in the hand-loom industry. In *Iron and steel goods* the share of the U. K. is declining and that of France and Belgium is increasing.

Machinery and Mill Work—The variety of machines shows how the economic transition is progressing in different industries. The principal kinds are: prime movers, boilers, electrical machinery, metal-working, mining, oil crushing and refining, paper mills, refrigerating, rice and flour mills, sugar mills, tea, cotton, wool and jute machinery, printing, sewing and knitting, type writers etc. In 1913-14 and in 1925-26 the shares of U. K., U. S. A., and Germany were 90, 3, 6 and 79·4, 9·6, and 6 p.c. respectively.

Railway Plant—The share of the United Kingdom is declining and of Belgium and Germany increasing. In *Hardware* (consisting mostly of agricultural and other implements, tools, lamps, stoves, domestic hardware, etc.) the share of the United Kingdom has declined and that of the United States, Germany and Japan has increased. *Motor Vehicles*,—there is a steady expansion of trade owing to the extension of motor transport. The chief countries from which the cars are imported are the United Kingdom, United States, Canada and Italy.

Sugar—As India is the largest sugar-cane growing

country in the world it is instructive to note the present state of sugar-production in the world. This production reached the record figure of 23·6 million tons in 1924-25. There was a large production in Cuba and the beet-root sugar industry in Central Europe has recovered. As a result of this increased production there was a fall in prices and India made heavy imports. 90 p. c. of the imports come from Java.

Mineral Oils—Kerosene oil, fuel oil and lubricants—71 p. c. of the imports come from the U. S. A.

Provisions—Mostly canned and bottled provisions, foods, condensed milk, biscuits, bacon and ham, etc. Nearly 38 p. c. come from the U. K. and 23 p. c. from Netherlands.

Indian Exports—Raw Cotton—India produces roughly 6 Million bales (of 400 lbs.) of cotton, the U. S. A. and Egypt producing 21 and 2 millions respectively. The price of Indian cotton is determined by that of American cotton which dominates the world cotton market. India exports $\frac{2}{3}$ of the cotton it produces, $\frac{1}{3}$ being required for domestic consumption. Japan takes half of the exports, the U. K., Italy and Belgium being other considerable customers.

Cotton Manufactures—Figures bring out the disquieting and growing tendency of the cotton manufactures to decline. The Indian yarn is meeting with intense competition in China, Egypt and Aden. Indian piece-goods are being driven out of Mesopotamia and Persia. The cotton industry has been for some years in such a state of depression that as a measure of relief the Excise duty on Indian-made cotton goods was suspended in December 1925 and altogether abolished in March 1926. The Indian Tariff Board recently made a thorough enquiry into

this important industry and Government action on the Report of this Board is awaited with great interest.

Under *food grains* rice occupies by far the most important place, representing as much as 83 p.c. of the whole. We may say that roughly half of rice produced in Burma is exported. Imports of wheat very seriously declined in 1925-26. The remarks on this decline in the *Review of Indian Trade in 1925-26* bring out the uncertain nature of the foreign markets for Indian food-grains. "The exports of Indian food-grains in 1924-25 (1,112,000 tons) were high as a series of successive excellent harvests gave a surplus over local requirements and high prices were obtained in the foreign markets owing to fear of shortage of supplies. In consequence there was a considerable reduction in stocks and the 1924-25 crop producing a smaller out-turn, supplies in India were not large. The Indian prices, therefore, did not compare favourably with prices outside as in other wheat-growing countries the crops gave a good yield." The Indian prices follow Liverpool and London prices.

Oil Seeds—Here the interesting feature of post-war demand is that Germany is not taking as much linseed as formerly as she is growing that crop for her own requirements. On the other hand rapeseed is becoming more popular as an ingredient in the manufacture of margarine and so also ground-nut is becoming more popular in France.

With regard to *Tea* it will be noted that the bulk of the crop is exported, large quantities finding their way to the United States and Canada.

Hides and Skins—The trade in raw hides has been in a state of depression for some years past. The increased demand for meat in the United Kingdom has

also increased the supplies of hides. "Changes in fashion have also reduced the amount of leather used in the manufacture of foot-wear in favour of lighter material. The costs of reconditioning inferior hides have increased since the War as a result of rise in industrial wages. The chief demand for Indian raw hides has always been in Central Europe, especially in Germany, Austria and Italy. It is said that after the War Continental dealers have turned their attention to South American and African markets, attracted thither by lower prices. It has also been suggested that Indian hides have failed to regain their hold on Continental markets as entirely different plant and methods are required for the tanning of South American and Indian hides and now that South American hides have established themselves, German buyers particularly have become less interested in Indian hides."*

(6) CHANGES IN PROPORTIONAL COMPOSITION OF IMPORTS AND EXPORTS :—Thus both under imports and exports there have taken place important changes in the shares of the foreign *countries* in the trade of India. A similar change has taken place in the proportions in which different *articles* made up the imports and exports in the pre-war years and in 1925-1926 as can be seen from the following table :

Review of Indian Trade, 1925-26. p. 35.

Variations in the Shares of the Principal Articles in
the Import & Export Trade of British India.

<i>Imports</i>			<i>Exports</i>		
	Pre-War Average 1909-14	1925-26		Pre-War Average 1909-14	1925-26
Cotton Manufc.	36	29	Jute (Raw & Man)	19	26
Iron & Steel ...	7	8	Cotton (Raw&Man)	21	28
Machinery ...	4	7	Food-grains ...	21	13
Sugar ...	9	7	Seeds ...	11	8
Ry. Plant ...	4	2	Tea ...	6	7
Hardware ...	2	2	Hides & Skins ...	5	2
Mineral Oils	3	4	Other Articles ...	17	16
Silk ...	2	1			
Other Articles	33	40			

The tendencies revealed by the foregoing table are disquieting. Under *imports* there is a noticeable reduction of cotton manufactures; our requirements in iron and steel, machinery, railway plant and hardware taken together are nearly the same. We are consuming more sugar and more mineral oils; but on the whole our imports are getting *more diversified*. Under *exports*, on the contrary, there is *less diversity*

even in the agricultural products to which they are mostly confined. Jute and cotton between them formed 55 p.c. of the exports. On the whole we are exporting *more* of fibre crops to pay for a *greater* range of imports. So far as we have a monopoly of jute (raw and manufactured) the situation may not be alarming. But any external or internal factors that contract our exports of cotton (and among the external factors the American cotton crop is the determining factor) will produce disastrous repercussions upon our national economy.

(7) LESSONS OF THE GREAT WAR—We have now passed under review the main effects of the War upon Indian trade, namely, its *sudden* reduction in volume and *slow* recovery, its initial convergence upon the United Kingdom and subsequent diversion to the other countries. We have also analysed the main features of that trade in 1925-26. Can we draw any useful lessons from the experiences of the War?

(a) *The Danger of Dependence.*—The first great lesson is the danger of our helpless dependence upon foreign markets for the disposal of our agricultural products and upon foreign supplies for our domestic and industrial requirements. This is clearly brought out in the movement of prices during the last ten years.

Index Numbers of Wholesale Prices of Staple Commodities at Calcutta.

Price in July 1914=100

Period	Food grains		Sugar	Tea	Oil seeds	Textiles				Hides & Skins	Metals	All com- modities
	Cereals	Pulses				Jute Raw	Jute Manfd.	Cotton Raw	Cotton Manfd			
1914, End of July	100	100	100	100	100	100	100	100	100	100	100	100
1915, Annual Average	115	122	164	115	81	68	109	89	97	102	120	112
1916 "	106	107	184	114	85	80	129	121	134	118	186	128
1917 "	92	96	189	95	83	65	138	174	203	112	266	145
1918 "	110	119	180	95	104	75	219	309	298	96	301	178
1919 "	163	180	268	105	198	115	175	230	295	184	236	196
1920 "	154	166	407	78	173	104	149	153	325	147	238	201
1921 "	145	160	270	100	135	83	105	143	280	108	237	178
1922 "	137	152	221	159	147	110	144	191	239	120	175	176
1923 "	114	112	246	206	138	90	138	244	221	135	165	172
1924 "	123	114	239	205	144	102	159	272	229	124	162	173
1925 "	136	128	179	180	146	154	177	205	210	104	131	159

A careful study of these index numbers leads to the following conclusions: Under *Exports*, prices *rose less* in the case of those commodities only a small proportion of which is normally exported abroad *e. g.* cereals and pulses. They actually *declined* in the case of those commodities a substantial proportion of which is normally exported, *e. g.* tea, oil-seeds, raw jute and cotton, hides and skins. The price of cotton depends upon American conditions. Price of tea is recovering, but that of oil-seeds and hides and skins is slack. There was a *temporary* rise in the price of jute manufactures at the close of the War; it then fell, and is now recovering. Under *imports* prices *rose suddenly* and *remained high* in the case of sugar and cotton manufactures. The prices of metals also remained high for a long time. It will be observed that *highest* prices were reached in the case of *imported manufactures* and *lowest* in the case of *exported raw materials*.

Contrast with these relative price movements of imports and exports in India the following index-numbers of prices in the United States of America, (prepared by the Federal Reserve Board).*

	Goods Imported.	Goods Exported.	All Commodities.
1913 .	100	100	100
July 1922 ...	128	165	165
April 1923 ...	156	186	169
July 1923 ...	141	170	159

* Keynes' : *Tract on Monetary Reform* : p. 94.

The prices of American imports *rose less* and *fell more rapidly* than the general level of prices. The prices of American exports *rose more* and *fell less rapidly* than the general price level. In *both* cases America *gained* for she received *more* for her exports and paid *less* for her imports. India, on the other hand *suffered* in both directions, for she received *less* for her exports and had to pay *more* for her imports.

(b) *Instability of our Industries*—Again the Great War brought home to us certain deficiencies in our industrial equipment. It showed that what little progress we have made in organized industries is *unstable*. The causes of this instability were carefully analysed by the Indian Industrial Commission.* The direction of the industrial development of our country was determined by the existence of a large export trade and by the ease with which most classes of manufactured articles could be imported. In the West all industries rest upon the basis of iron and steel production, the manufacture of machinery, tools and heavy chemicals like sulphuric acid. In the complete absence of such foundational industries manufactures were built up in India, almost "in the air". So long as the requisite machines, tools, etc. could be imported no inconvenience was felt. But their essential weakness was brought into prominent notice by the interference with industrial supplies from overseas due to the War. We lack certain essential *materials* and *articles*. In materials we have deficiency of zinc, lead, copper, aluminium, tungsten and graphite; heavy chemicals like sulphuric acid; vegetable products like rubber, flax. The requisite raw materials for these materials are to be found in

* Cf. Ch. IV of the *Report*.

abundance in the country and they are actually *exported*. But there are no means *within* the country of working up the materials. Under *articles* we have complete lack of nails and screws, electric plant, all kinds of machine tools, steam engines, boilers, oil and gas engines, etc. As the Report says* “The list of industries which, though their products are essential alike in peace and war, are lacking in this country, is lengthy and almost ominous. Until they are brought into existence on an adequate scale, Indian capitalists will, in times of peace, be deprived of a number of profitable enterprises, whilst in the event of a war which renders sea-transport impossible, India’s all-important existing industries will be exposed to the risk of stoppage, her consumers to great hardships, and her armed forces to the greatest possible danger.” The Industrial Commission went so far as to recommend† that “the Indian Government must take special steps to facilitate the manufacture in India of: magnetos, incandescent lamps, ferro-tungsten, ‘high speed’ steel, graphite crucibles, special forms of porcelain for insulators, chemical glass, certain heavy chemicals, rubber and vulcanite.”

Nowhere was this deficiency more keenly felt than in the working of Indian railways. In spite of a mileage of over 36000 India depends almost exclusively upon overseas supplies of carriages, wagons, locomotives, etc. During the War all schemes of expansion had to be forthwith abandoned and the existing lines starved as to renewals and repairs. The transport of necessary raw materials like cotton, coal, etc. was seriously hampered and this imposed an additional

* *Indian Industrial Com. Rep.* p. 55. † Page 56.

handicap upon Indian industries. They, therefore, failed to take advantage of the high prices that prevailed during War times, and some had to actually curtail their output.

(c) *Indian Mercantile Marine*—Not only were our industrial deficiencies demonstrated by the War, but it made us realize the importance of a national mercantile marine. The War cut off our imports and curtailed our exports because of our lack of shipping. The prices of our staple exports *fell* and the agriculturists suffered. We could not reach the European markets when they were most in need of our products. Those countries, *e.g.* the United States, Canada, Argentine, which commanded the European markets reaped great advantages because of their mercantile marine.

(d) *Importance of Coastal Trade*—A mercantile marine would not only have enabled us to command European markets but it would have developed the coastal trade of the country. Apart from other advantages of a coastal trade, coastal transport would have relieved the pressure upon Indian railways. The Great War at once starved and overworked the railways. The pressure would have been less if an alternative means of transport had existed along the coast. Even as the figures stand the total value of the coastal trade of the country is more than Rs. 200 crores per annum, the exports and imports being half and half. But a substantial proportion of this figure is due to the maritime trade between India and Burma. The coastal trade was worth less than 130 crores of Rs. in 1917-18. It increased to 223 crores in 1919-20. This shows that *some* diversion of traffic from the railways to the coast did take place during the War.

But coastal transport should be regarded as a *normal complement* to railway transport and not as an *emergency substitute* for it. This points to the urgency of improving the many neglected ports on the Indian coast line. At present the exigencies of export trade have concentrated all trade, commerce and incidental industries in the five principal ports of the country, *viz.* Karachi, Bombay, Madras, Calcutta and Rangoon. The importance of other ports should be recognized; they should be connected with inland railways, and provided with terminal facilities. A proper distribution of the country's trade between railway transport, river transport and coastal transport is desirable as much from the economic, as from the national, point of view as it makes for elasticity in the total means of transport that are at the disposal of the trade and population of a country.

(e) *Importance of Trans-frontier and Inland Trade—*

All modern production, to be successfully carried on, must command *stable* and *extensive* markets. Railways and mercantile marine are only a *means* to maintain command over distant markets. The War showed that the development of Indian trade was *one-sided*. *External sea-borne* trade had increased at the cost of *internal* and *trans-frontier* land trade. Let us see the possibilities of developing the *trans-frontier trade of India*. This trade was worth 19 crores of Rs. (10.38 crores imports + 8.61 crores exports) in 1915-16 and 39 crores (20.79 crores imports + 18.06 exports) in 1924-25. This is a small fraction of the sea-borne trade. The chief obstacle in the development of this trade in the past was the lack of railway transport on the frontiers. Railways have now been constructed for the defence of the country and they can be utilized

for the extension of commerce. Our chief customers along and beyond the land frontier are Persia, Afghanistan, Dir and Swat Valleys, Tibet, Nepal, Sikkim, Western China, the Shan States and Siam. All these states or regions with the exception of Persia in the west and Siam in the east are hundreds of miles away from a seaport and must depend upon Indian ports for the products of modern industry. The nature of the trade is also promising. The *imports* consist of rice, dried fruits and nuts, ghee, living animals, raw wool, etc. The *exports* consist of cotton goods (foreign and Indian), copper and iron vessels, yarn (foreign and Indian), salt and spices, leather goods and silk goods. Thus the regions are yet industrially backward; their mineral wealth is yet not known; they are thus a promising market for the products of Indian, and also European, industry until these vast hinterlands of India develop their own industries.

The following table gives details of trans-frontier trade in 1924-1925. Figures are in lacs of Rs.

Country	Imports		Exports	
	Merchan- dise.	Trea- sure.	Merchan- dise.	Treasure
Persia	66·32	.....	256·45	.....
Afghanistan ...	167·95	·83	278·20	.....
Dir, Swat, etc. ...	35·03	.....	51·56	.....
Chinese Turkestan.	22·63	6·67	14·23	·41
Central Asia ...	21·12	5·95	15·39	1·22
Tibet	57·39	6·80	35·54	16·13
Nepal	582·00	18·58	279·43	4·66
Sikkim	65·51	·5	15·79	·34
Western China ...	122·34	32·40	96·78	9·83
Shan States ...	844·13	146·97	703·51	20·18
Siam (North & S.)..	46·77	7·39	13·23	12·64
Other Countries ...	48·27	3·88	46·75	1·45
Total	2079·46	229·52	1806·86	66·86

But the most secure market that a country can have is its own internal market. A large population means a large market for agricultural products. Domestic industries are a market for the raw materials supplied

by agriculture, forestry and mining. The size of the domestic market depends upon the size and diversity of the country and the size and productivity of its population. For a country like India, therefore, internal trade is far more important than external trade. It is difficult to make a correct valuation of the total inland trade of a country. Data for external trade are easily collected; the channels of this trade are fixed and limited and capable of close supervision; and the data are also required for fiscal and administrative purposes. But such is not the case with regard to internal trade, and even countries like the United States of America do not possess accurate data of their internal trade, though various estimates have been made. They all show that for the United States internal trade is many times more valuable than their external trade. Reliable data for India's internal trade are not available. From certain calculations Prof. Shah puts the value of this trade at between 2000 to 2500 crores of Rs. every year. This is a small figure in view of the diversity, extent and population of the country. It is a proof of the neglect of the domestic market. "If Indian markets are to be developed, if only to compensate for the possible loss of other markets in consequence of an altered fiscal policy; if the regional differences between the provinces of India are to be fully utilized for purposes of internal trade, attention must be paid in an ever-increasing proportion to the proper organization of the inland market. The grave preponderance of foreign trade has served to deflect attention from the real importance of our home trade. Domestic markets have, therefore, been wholly neglected. It becomes, accordingly, both a necessity and an advantage to concentrate attention on the proper

development of the home market.”*

(f) *The Financial Aspect of External Trade.*—The War also brought into prominent notice the financial embarrassment and loss that must result from a large foreign trade whenever the exchanges go out of control. During the War the imports were severely restricted and the demands of the Allies required the steady export of commodities for military purposes. The Indian Government had also to finance military operations in Asia and Africa on behalf of the Imperial Government. All this increased the ‘favourable’ balance that accumulated in London to the credit of India. As the export of gold was prohibited the Secretary of State was hard put to it to devise means to liquidate this balance. The exchange soon recovered from the fall it suffered when the War broke out and began to rise on account of a pressing demand for remittances to India. The Indian Government could not satisfy the demand for additional currency—in rupees or notes. The heavy coinage of rupees created an unprecedented demand for silver whose price went up by leaps and bounds. The rise in the price of silver introduced a new factor in the regulation of the exchange which had to be raised in sympathy with the price of silver. This rise in exchange produced a series of disastrous consequences upon the balances and reserves of the Indian Government and upon the trade and industry of the country.

We are not concerned here with the details of this subject. But it must be realized that the War-time prosperity was unreal. The abnormal accumulation of favourable balances in London was in itself a sign

* Prof Shah : *Trade, Tariffs and Transport in India* : p. 122.

of weakness than of prosperity. The balance was partly liquidated by the inflation of currency—adding more rupees and notes to the volume of the circulating medium. But this can hardly be called a sign of prosperity. As Prof. Panandikar points out* “The increase in the balance had the effect of merely giving to her (*i. e.* Indian) people large quantities of paper money and precious metals, which were largely hoarded, while the true test of an increase in the prosperity of a country lies in an increase in her consumption of goods which go to make up a civilized standard of life.”

In this connection the difference in the behaviour of the English and Indian exchanges during the War and after is worth noting. On account of a severe check to the export of manufactures (which normally pays for her imports of raw materials and food stuffs) and a persistent demand for food stuffs and war requisites the balance became permanently *adverse* to the United Kingdom, with a *fall* in her exchange and a *depreciation* of the sterling (in terms of dollars or gold). The British Government adopted various expedients to arrest the falling exchange, *viz.* floatation of loans in America, sale in New York of American Securities held by Englishmen, and the ‘pegging’ of the sterling-dollar exchange.

It was otherwise with the rupee-sterling exchange. Here the exchange was constantly *rising*, *i. e.* the tendency was towards the *external appreciation* of the rupee. But India failed to get the benefit of this tendency on account of the currency policy of the Indian and British Governments.

* *Economic Consequences of the War for India* : p. 47.

Thus the War showed that an exclusive or preponderating dependence upon external markets (either for exports or imports)—however harmless it may appear under normal conditions—is fraught with the greatest danger from the *financial* point of view when a war breaks out and the foreign exchanges get dislocated.

Conclusion—Thus the War has demonstrated that our industrial development has been dangerously one-sided; our progress in organized industries is small and unstable. Not only do we depend upon foreign countries for the supply of manufactures and disposal of our raw materials but we do not possess even the nucleus of a mercantile marine. The War, therefore, failed to confer upon us any lasting advantages. Other countries, *e.g.* the United States and Japan made important conquests in the Indian market as a result of the War. But we are where we were. There was a feverish fit of prosperity for a year or two but then followed a period of depression the end of which is not yet in sight.

The preceding argument—based upon experiences of the Great War—points to the inevitable conclusion that national prosperity, to be diffused, stable and permanent, must have a broad and solid foundation; it should rest as much upon improved agriculture as upon organized and developed industries; a national mercantile marine must maintain its trade with the rest of the world; it must look upon external trade as a *means* of developing the internal market and not *vice versa*. To have two strings to one's bow is a useful maxim as much in archery as in National Economy.

(8) IMPERIAL PREFERENCE.—If the War points to the desirability of an *all-round* development of Indian industries (manufacturing and agricultural) and to a *wider* dispersion of Indian trade

accompanied by greater dependence upon the home market, efforts are being made to give a special direction to the course of the economic development of the country in the interests of the Empire. We may call this the policy of Imperial Preference and briefly notice here the powerful agencies that are at work in so developing the resources of India that they will contribute to the self-sufficiency and solidarity of the British Empire.

Reference has already been made to the declining share of the United Kingdom in the import and export trade of India. In the exports, particularly, the decline is striking and alarming. The present disparity between the imports from and Indian exports to the United Kingdom has not escaped the notice of responsible authorities. Thus Mr. Ainscough, H. M. Senior Trade Commissioner in India and Ceylon, remarks*: "It is a great potential source of weakness that the British Isles should only take from India less than one half of the value of goods which she exports to India. Apart from economic laws, there is a growing tendency all over the world for a country to purchase its imports from those countries which are the most important customers for its own produce. India's most important markets, apart from the United Kingdom, are Japan, the United States, Germany, Italy and France and there is every likelihood that she will buy more and more from those countries." The War has taught England to appreciate the value of the resources of India in food grains and raw materials. These resources were mobilized, under official control, for the successful prosecution of the War. The War

* *Report on Some Aspects of British Trade in India, 1923-24* : p. 19.

demonstrated the danger of England's dependence upon foreign supplies in the matter of good stuffs and raw materials. This danger will be minimised if the United Kingdom depend upon her Colonies and Dependencies for these supplies. There is a widespread movement to bind the Empire more closely and organically, not only politically but economically. Nothing would contribute more powerfully to that consummation than that India should supply food grains and raw materials to the United Kingdom and that the United Kingdom should supply manufactures to India.

We need not pause here to analyse the extent to which India can satisfy the demand of the United Kingdom (and of the Empire generally) in the matter of commodities like cotton, wheat, rice, tea, rubber, minerals, hides and skins. In some her share even now is considerable ; in most it is capable of much increase. From this point of view the exploitation of Indian resources assumes a new significance as an item in the programme of Imperial Development. The number of Committees and Commissions that have during the last ten years examined the whole gamut of Indian economic problems is the result as much of the anxiety of the British Government to promote Imperial interests as of the yielding of the Indian Government to popular pressure to undertake such enquiries. Let us just glance at the measures the British Government is contemplating or adopting for a closer co-operation between the different parts of the Empire so far as economic matters are concerned.

Even while the War was going on, the Imperial War Conference of 1917 adopted the following Resolution (No. XXI):

"The time has arrived when all possible encouragement should be given to the development of Imperial resources, and especially to making the Empire independent of other countries in respect of food supplies, raw materials and essential industries. With these objects in view this Conference expresses itself in favour of: (1) the principle that each part of the Empire, having due regard to the interests of our Allies, shall give especially favourable treatment and facilities to the produce and manufactures of other parts of the Empire; (2) arrangements by which intending emigrants from the United Kingdom may be induced to settle in countries under the British Flag.

The next stage is marked by the holding of the Imperial Economic Conference in 1923 which reaffirmed the Resolution of the War Conference of 1917. It established two permanent Committees: (a) The Imperial Economic Committee on which all the Governments of the Empire are represented and (b) the Imperial Shipping Committee. The Imperial Economic Committee is to investigate into the marketing of Empire food stuffs in Great Britain and to indicate raw materials for possible marketing enquiries. The Imperial Parliament also set aside a large sum of money for the development of Colonial markets and a special Imperial Marketing Board was set up to administer this grant. The value of developing trade in the Colonies, Protectorates and Mandated Territories of the Empire becomes obvious when one remembers that the total trade of these parts is worth more than 500 million £s per year. Parts of the Empire, lying mainly in the tropics, have immense possibilities. "Production in the tropics was complementary to the

industrial production of the temperate zones.”*

An important impediment to the development of these resources lies in the lack or inadequacy of transport facilities. The Imperial Conference attacked this problem in a systematic manner. Efforts were made to improve the *oceanic* communications between Great Britain, India, Australia and New Zealand. The Imperial Shipping Committee was directed to deal with a number of technical questions and settle them on uniform lines. As regards *land* communications Parliament voted a sum of 10 million £s to increase transport facilities in East Africa. As regards *air* communications, the Secretary of State for Air thus described the policy for the encouragement of civil aviation. “The ultimate object of this policy was to bring the most distant parts of the Empire within a fortnight’s journey from London.” Two air routes were to be developed: one from England to Australia, and the other from England to South Africa. Each part of the Empire was to develop air navigation routes so as “gradually to build up, on what might be called a mosaic plan, a complete system of Imperial air routes.”† The political and commercial importance of these air routes is obvious.

A number of Imperial organizations has lately sprung into existence for the development of the material resources of the tropical parts of the Empire. The basis of this development is scientific *research*. A special Committee of the Imperial Conference has been formed for the purpose and an Imperial Institute is being established. The Imperial Conference recognized the need of

* *Report of the Imperial Conference*, 1926 : p. 31.

† *Rep. Imp. Conf.* 1926 : p. 40.

(a) an active prosecution of research in all fields of applied science.

(b) the fullest practicable co-operation between the organizations respectively responsible for agricultural, fisheries, forestry, medical and industrial research.

(c) the quick and orderly exchange of the results of research between the various Governments and research establishments of the Empire.

(d) the fullest discussion of problems of common interest.

Thus an Imperial College of Tropical Agriculture has been established at Trinidad, an Imperial Forest Institute at Oxford and an Imperial Institute for Tropical Diseases at Colombo.

Again there are bureaus for the dissemination of scientific information like the Imperial Bureau of Entomology and Mycology.

The Imperial Government realized the value of the forests in the Empire. The forest resources are being rapidly exhausted and the Imperial Conference, therefore, urged upon the various countries of the Empire to take effective measures for maintaining, and where possible extending, their forest areas on a system of management based on sustained production of timber. They now periodically hold an Empire Forest Conference.

Agriculture is not neglected. An Imperial Research Conference was held in London in 1927. A Royal Commission is at present engaged upon Indian Agriculture. There are also permanent Associations like the Empire Cotton Growing Corporation in close contact with the Imperial Government and interested in particular crops like tobacco, tea, rubber, jute, etc.

The raw materials and food stuffs that will be had

in greater abundance as a result of these activities are to be easily transported to the United Kingdom, and to facilitate their trade, a comprehensive fiscal policy of Imperial Preference is to be evolved. Indeed a beginning has already been made since 1924, the United Kingdom giving a preference of one-sixth of the full rate to Empire-grown tea, coffee, cocoa, chicory, fruit (dried and preserved), sugar and tobacco; of one-third of the full rate to Empire-manufactured cinema films, clocks and watches, motor cars; of two-fifths of the full rate to wines and spirits, and as for 'key industry goods', they are to be admitted duty free.

So that while *we* look upon India as a country by itself and view its economic development in relation to the well-being and prosperity of Indians, the possibility of its being regarded as a mere unit—and a subordinate unit—in an Imperial scheme for the production of wealth should never be lost sight of, especially as it affords us a valuable perspective to a study of the efforts now being made for the development of its resources.

CHAPTER V

THE INDIAN POPULATION

We shall now proceed to consider the effects of the economic transition upon the Indian Population. We shall deal with four aspects of population: (a) Its growth; (b) its occupational distribution; (c) its migration (internal); and (d) its density.

(1) MOVEMENT OR GROWTH OF POPULATION. The Census of 1921 gives us the following figures for the area and population of India as a whole.

	Area (Sq. M.)	Population
British India	1,094,300 (61%)	247,003,293 (77%)
Indian States	711,032 (39%)	71,939,187 (23%)
Total ...	1,805,332 (Sq.M.)	318,942,480

Thus British India contains 61 p.c. of the total area and 77 p.c. of the total population of India.

We have got figures for the growth of the population from 1871 onwards when the first regular census was taken, but as new areas and populations were included in successive censuses, and as the earlier enumerations were not quite accurate, no definite conclusions can be drawn with regard to the *rate* of growth. Allowing for these factors, however,

it has been estimated that during the period 1871-1920 there has been a real increase of 53·8 millions, or 20·1 p.c. in 50 years. But the growth has not been uniform throughout the period. It was as follows :—

Period	Rate of Growth	During two periods
1872—81	1·5 %	(1881-1891) and (1901-11)
1881—91	9·6 %	the rate is comparable to
1891—1901	1·4 %	that of western countries.
1901—11	6·4 %	In the remaining three
1911—21	1·2 %	periods (1872-81, 1891-
	<hr/>	1901, 1911-21) the rate
	20·1 %	varies between 1·2 and

1·5 and is abnormally low. We must find out the causes of the violent fluctuations in the rate of growth.

(a) *The Birth-rate*—The rate of increase of any population depends upon two factors: natural increase and migration in the form of emigration and immigration. In the case of India both these forms of migration are negligible compared with the total population. By natural increase we mean the excess of births over deaths. We must, therefore, analyse the conditions governing the birth-rate and death-rate in India.

The birth-rate depends upon the number of married persons per thousand, the age of marriage, and the fruitfulness of marriage. A small addition is made to the population by illegitimate births, but we may neglect this addition.

The relevant statistics are given in the following table* :—

Age	Unmarried		Married		Widowed	
	Males	Females	Males	Females	Males	Females
0—5	994	988	6	11	—	1
5—10	966	907	32	88	2	5
10—15	879	601	116	382	5	17
15—20	687	188	298	771	15	41
20—25	402	51	564	877	34	72
25—30	194	25	752	863	54	112
30—35	98	19	826	797	76	184
35—40	62	15	847	727	91	258
40—45	52	14	825	599	123	387
45—50	41	13	812	527	147	460
50—55	39	11	767	370	194	619
55—60	37	12	742	352	221	636
60—65	35	11	684	193	381	796
65—70	38	15	648	207	314	778
70 & over	39	14	567	127	394	859

From the foregoing figures the Census Commissioner of 1921 has drawn three obvious conclusions: (a) the universality of marriage in India; (b) the early age of marriage; and (c) the large proportion of widows in the Indian population.

Universality of Marriage—The universal tendency to marriage is the result of religious precepts among the Hindus and the Jains at any rate, and is encouraged by the joint-family system. It is also the result of rigid caste rules. The question of caste as a determining factor in marriage need be considered here only so far as it affects the number of marriages.

* *Indian Census Report*, 1921 : p. 153.

Though caste-rules make marriage obligatory, caste-restrictions at the same time give rise to temporary difficulties in obtaining a sufficient number of brides or bridegrooms in a particular community. Yet, as the Census Report says,* "The structure of society is continually undergoing modifications and the rules, with the aid of appropriate fictions and a convenient incuriosity, are usually sufficiently elastic to secure that there should be no serious shortage in the matrimonial market."

There are no figures available for the number of marriages that take place in the country year by year. With the Hindus and Jains marriage is a religious sacrament and needs no registration. The religious nature of marriage is seen in the permission given to take more than one wife if there be no male issue by the first, and in the freedom given to a widower to remarry, but in the prohibition of widow remarriage. There is a close connection between the number of marriages and the state of agricultural prosperity, for the ceremony involves lavish expenditure, loans being generally raised for which the crops are the security. The birth-rate also is a sensitive barometer of prosperity. Nothing is clearer than the effects of marked abundance of food or the reverse upon the general state of the public health, and of both food and health upon the birth-rate.† In times of scarcity or famine marriages are postponed and the able-bodied leave their homes for employment or relief and there is a marked fall in the birth-rate. This rate jumps up with a sudden bound with the

* *Census Report*, 1921 : p. 152.

† *Imp. Gaz. Vol. I.*, p. 508-9.

return of normal times. Thus though the struggle for existence is getting keener every day and the age of marriage is being appreciably postponed, marriage, especially in the case of females, is still universal in the country. Not only is marriage *less* general in the West but the connection between marriage and the begetting of children is not so inevitable there as it is in this country.

Early Marriages—As remarkable as its universality is the early age at which marriage takes place in the country. "This custom of child marriage (*i.e.* marriage before the age of ten) is most prevalent in Bihar and Orissa, Bombay, Baroda, the Central India tract and Hyderabad. It is rare in Assam, Burma, the N.-W. Fr. Province and the States of Southern India. It is not exclusively a Hindu custom, and of the Hindus who are most addicted to the practice it is among the lower rather than the higher castes that the custom is most rigidly observed."*

We must carefully understand the precise influence of the early age of marriage upon the growth of numbers. In the first place, though the *form* of marriage may be gone through at an early—or even very early—age, marital relations begin when the girl attains the age of puberty. On account of climatic and other causes girls mature in India between 12 and 14. This is much earlier than in temperate regions. Early marriages, therefore, mean a *very high* birth-rate. But a high birth-rate may not always mean an *effective* rapid rate of growth, because it brings in its train (*a*) a high infant mortality and (*b*)

* *Indian Census Report*, 1921 : p. 157.

a high death-rate among females between the ages of 15 to 25, about which more will be said under death-rate. These are "factors that doubtless operate to diminish the full measure of fertility which the mere marriage rate would lead one to expect among a people the vast majority of whom are impelled by social and religious sanctions to disregard prudential considerations. The early age at marriage, with the premature strain on the immature functions, probably leads to early exhaustion in both the sexes, which is perhaps hastened by the debilitating effects of malarial fevers to which all are subject; the practice of the prolonged suckling of infants may also operate. Lastly, the earliest age of procreative power is not the age of greatest fecundity."* Thus early marriages amount to nothing short of race suicide. In view of these serious social and economic consequences of this practice of early marriages, no reform at the present moment is more urgent—as much in the interest of the present generation as of the generations yet unborn—than raising the age of marriage. Legislation along this line is being undertaken or discussed. But a strong public opinion must be formed on this subject. Apart from other advantages, no other *single* reform would contribute more to the emancipation of women in India.

Widows:—The birth-rate would have been *higher* still but for the prevalence of a disproportionately large number of widows in the Hindu population. In England and Wales (and in other Western Countries) practically there are no widows below the age of 25. In India there are as many as 56 widows

* *Imp. Gaz.*, Vol. I., p. 508.

per thousand of the female population between 15 & 25. This excess is due to the custom of early marriages, to the disparity in the ages of husband and wife in many marriages, but above all to the prejudice against widow remarriage among the Hindus and the Jains. This prejudice is *strongest* in the higher classes, and curiously enough, it is spreading to the lower classes also. Widow remarriage is another item in the programme of social reform in India.

We have now noticed the chief factors that govern the birth-rate in India. This rate was as follows for the whole country between 1915 to 1925, and for the different provinces in the period (1911-21) when the rate was *lower* than the normal average as one of the sequelæ of the influenza of 1918-19.

The ratio of births & deaths per mille for a population of 240 millions.				Birth-rate & death rate per mille for the various provinces for 1911-21.			
		<i>Births</i>	<i>Deaths</i>			<i>Births</i>	<i>Deaths</i>
1915	...	37·82	29·94	Assam	...	32·3	31·3
1916	...	37·13	29·10	Bengal	...	32·8	31·1
1917	...	39·33	32·72	Bihar & O. ...	...	38·8	35·2
1918	...	35·35	62·46	Bombay	...	34·2	36·9
1919	...	30·24	35·87	Burma	...	33·5	27·6
1920	...	32·98	30·84	C. P & Berar	...	45·5	44·2
1921	...	32·20	30·59	Madras	...	30·7	25·6
1922	...	31·85	24·02	N. W. Fr. Pr.	...	32·8	30·3
1923	...	35·06	25·00	Punjab	...	43·8	36·6
1924	...	34·44	28·49	U. Pro.	...	42·2	40·2

**Birth-rate and Death-rate for the
Province of Bombay for
the years 1915-24**

Year	Birth-Rate	Death-Rate	Rate of Growth
1915	37.10	26.12	+ 10.98
1916	35.98	33.32	+ 2.66
1917	35.73	40.76	- 5.03
1918	31.61	88.05	-56.44
1919	27.90	32.54	- 4.64
1920	30.28	28.65	+ 1.63
1921	32.59	26.00	+ 6.59
1922	32.39	23.61	+ 8.78
1923	35.58	25.89	+ 9.95
1924	35.60	27.63	+ 7.97

The *steadiness* of the Indian birth-rate at a *high* level is in marked contrast with the *low* and *declining* birth-rate in Western countries. The following figures—though not the latest—will equally well serve to illustrate this point.*

COUNTRY.	Birth-rate per mille.	Year.
France	19.0	1912
England and W. ...	20.9	1916
Belgium	22.6	1912
Prussia	28.9	1912
Hungary	36.3	1912
Bulgaria	40.2	1911
Russia	44.0	1909

It will be seen that the Indian rate is comparable to that of the Eastern countries of Europe.

A steady decline in birth-rate is perhaps the most characteristic feature of

population movement in the West. In France the population is nearly stationary. The decline has been particularly marked in the higher strata of society.

* Dr. E. B. Reuter's *Population Problems*, p. 135.

Prudential considerations in contracting marriage and limiting the size of the family, greater cost of rearing and educating children, the growing reluctance of women to undergo the pains and responsibilities of maternity with their greater participation in political and social matters, and the practice of contraceptive methods are the main causes to which the declining birth-rate has been attributed.

The Death-rate—The Indian death-rate for the period 1915-1925 and the provincial rates for the years 1911-21 have been already given in the preceding table. A separate table gives the birth and death rates for Bombay Presidency for the period 1915-24. We see from the figures that (a) the rate is extremely variable as between the various provinces in a given period and (b) that in the same province it is equally variable in different periods. We also see that the range of fluctuation, *i. e.* the difference between the highest and lowest death-rate is very great, and that in some years the death-rate may exceed the birth-rate. In all these respects the Indian death-rate differs essentially from that in the West and has an important bearing upon the age-constitution, vitality and longevity of the population.

We shall now examine the incidence of mortality according to *age* and *sex*, and according to *local* and *seasonal* causes.

Age—Reference has been made to the custom of early marriages which contributes to excessive infant mortality. The death-rate of infants (*i. e.* children below one year of age) is usually calculated per 1000 live births in the year. This figure for the whole of India for the decade 1911-21 (excluding the abnormal influenza year) was 211, Bengal, Burma, Central

Provinces and Berar, and the United Provinces having more than the average, and Assam, Bihar-Orissa, Bombay, Madras, the N. W. Fr. Province and the Punjab, having less than the average. Not only does this rate differ with provinces, but it is closely affected by the state of agricultural prosperity, it is greater in the towns and greater still in the big cities. The Census Report (1921) gives* the following figures: In Bombay—the first city in the

Bombay	556	} Indian Empire—more than half the children born alive die before they reach their first year.
Calcutta	386	
Rangoon	303	
Madras	282	
Karachi	244	
Delhi	233	} In all cases the high death-rate may be ascribed to “the immaturity and ignorance of mothers, and to the physical labour the majority are called upon to perform; to improper feeding and to the exposure of infants to all the influences of an insanitary environment wherein the causes of malaria, small-pox, bowel complaints and tetanus abound.”†

There is a close connection between infant mortality, the size of the family and female mortality. In the first place the vitality of the mother and through her the life of the child appear to be affected by the age at which child-bearing begins, the number of births (or pregnancies) and especially the spacing of births. In the second place, the health of the infant is closely allied with the circumstances frequently associated with large families, *viz.* poverty, congestion, malnutrition, insanitary surroundings and the improvidence and ignorance of the parents.

A large infant mortality is the sign of the economic backwardness of a people. In Western countries, as

* *Ind. Cen. Rep.* (1921): p. 132.

† *Imp. Gaz.*: Vol. I. p. 518.

previously stated, the infant death-rate is *low* and steadily *falling*, as can be seen from the following figures given in the Indian Census Report:*

France	127	<i>Death-rate according to Sex—</i>
U. S. A.	124	Early marriages not only
England & W.	117	bring about excessive infant
Switzerland	115	mortality, but also greater
Scotland	108	female mortality. In Western
Ireland	94	countries the females out-
Sweden	78	number the males. In India
Norway	70	the reverse is the case for

the greater part of the country. Only in the South and the East (except in Bengal) the females exceed the males in number. In the West and the North the males preponderate. The explanation is to be found, aside from racial and climatic peculiarities, partly at any rate, in the general prejudice that prevails against the birth of female infants, the deficient care shown to them, and more particularly, in the heavy strain of maternity that is imposed upon them at an early age. The male death-rate *exceeds* the female death-rate up to 10 years; but between 10 and 30 females die in greater numbers than the males; after 30 again the male mortality exceeds female mortality.

Seasonal Variations—The death-rate is markedly affected by changes in the seasons, especially in those parts of India where the transition from the dry to the wet season is sudden and extreme. In the monsoon the rivers are flooded and all the accumulated impurities in the soil are washed into them. River water as well as well water becomes impure. Fever and bowel complaints increase and

* *Ind. Cen. Rep.* (1921): p. 131.

the death-rate takes a sudden upward jump. The mortality-curve is lowest in June and rises in the first two months of the monsoon. When the waters have subsided the curve declines. With the progress of the dry season the water supply in rivers as well as in wells and tanks is dried and what remains is polluted on account of its being indiscriminately used for all purposes. Conditions again become ripe for the outbreak of cholera when the first showers fall. Thus the death-rate is closely dependent upon seasonal variations.

Local Variations—The death-rate is lower in rural areas than in urban areas. In the smaller towns the sanitary arrangements are far from satisfactory and the habits of the people also have not appreciably improved. The dangers of congestion and insanitation reach their maximum in the big cities. In spite of efforts of the Health Department the death-rate is alarmingly high in the big cities.

Causes of Death—As given in official reports, the more important causes are cholera, small-pox, plague, fevers, dysentery, respiratory diseases and injuries. They fall into three classes: the specific fevers like malaria, small-pox, the kala-azar, etc.; diseases affecting the abdominal organs: notably cholera and enteric fevers, dysentery and diarrhoea; diseases of the lungs such as tuberculosis, pneumonia, bronchitis.

What distinguishes some of these causes as operating in India is their epidemic and virulent nature. The occurrence of epidemics of plague, cholera, small-pox and influenza carries away large numbers of the population. The extent of the indelible impression these epidemics make upon the Indian population can be gathered from the following figures. Since 1896

August, when it first broke out in Bombay plague is responsible for a total mortality of 11,581,459 up to the end of 1924, for the whole of India.* Even more appalling was the influenza mortality. This epidemic spread over the country in two waves: the first was in August 1918, and it was milder and shorter in duration; the second occurred in October and the following two months. The mortality was high in rural areas and among the females. The Census Report for 1921 puts the total mortality for the whole of India at between 13 to 14 millions. "It is interesting to note that even this conservative estimate of a mortality, the larger part of which occurred in the space of three or four months, exceeds by nearly 2 millions the total estimated deaths from plague extending over twenty years (1898-1918), and is a good deal more than double the death-rate directly attributable to the famines of the period 1897-1901. The number of deaths, however, is not of course the measure of the loss of life from the epidemic. The case mortality has been put roughly at about 10 p. c. and on this basis the total number of persons affected by the disease was about 125 millions or $\frac{2}{5}$ of the total population of India. The effect on the general health of the people is shown by the reaction in the birth-rate which dropped below the death-rate in 1918 and 1919 and only gave a slight excess in India in 1920."†

History of Death-rate in the Provinces—Such epidemics, and famines, which though they do not now-a-days cause direct mortality are morbid in their result, make the Indian death-rate highly *erratic* and

* *Statistical Abstract, Fourth Issue*: p. 366.

† *Ind. Census Report (1921)*: p. 14.

fluctuating. A brief review of the provincial figures brings this into clear relief. In *Assam* the steady increase in population since the opening up of the province was checked by the earthquake of 1897, and the prevalence of *Kala-azar* in the decade 1891-1901. Cholera and the *Kala-azar* occur frequently. Approximate influenza mortality : 200,000. In *Bengal* the Western and Central parts are intensely malarious. Malaria not only increases mortality but saps the vitality of the living and reduces the birth-rate. As a result these parts of Bengal have actually declined in population. Ravages by floods, cyclones and cholera are not rare. Estimated influenza mortality : 600,000. In *Bihar and Orissa* the growth of population since 1872 was checked in the period 1881-1911 by plague and famines. In 1918 cholera carried off 200,000 and then came influenza with a bag of 700,000. Famines are of frequent incidence in Orissa. In *Bombay* the growth of population has been most irregular. The severe famine of 1877 depopulated Southern Deccan and the Karnatak districts. The population steadily increased during the next fifteen years when came the first onslaught of plague and the terrible famine of 1899-1901. Plague has been ravaging this presidency now and again. The influenza also was very bad, carrying away a million souls. *Burma* lost roughly 250,000 on account of influenza. In *Central Provinces and Berar*, the famine of 1897-1901 took a heavy toll and the influenza more than 900,000. Parts of this province are more or less stricken by famines. In *Madras* the famines in the decade 1871-1881 carried off a million souls. The population rapidly recovered from this setback but was depleted to the tune of 600,000 by influenza. In the *N. W. Fr. Province* the growth of

population was checked by a severe outbreak of malaria in 1916 and of influenza in 1918. In the *Punjab* the population was very adversely affected by malaria and plague in the first decade of this century. Again between 1915 to 1919 every cause conspired to increase the death-rate : plague, malaria, bad harvests and influenza. In the *United Provinces* the population is dense in the Gangetic plain. In the decade 1901-11 plague and malaria made heavy inroads on the population. The influenza mortality for this province has been put at the high figure of $2\frac{1}{2}$ millions.

Contrast with Death-rate in Western Countries—The *high, steady and erratic* Indian death-rate is in strong contrast with the death-rate in Western countries which is *low, regular, and declining* as can be seen from the following table:

Death-rate for Principal European Countries in the Period 1870-1910.*

	U. Kingdom.	European Russia.	Germany.	France.	Austria.	Spain.	Italy.
1870	22.4	—	27.2	24.4	31.9	30.9	30.2
1880	20.0	—	25.8	22.4	30.7	30.6	28.7
1890	18.9	35.8	23.9	22.2	28.5	31.6	22.5
1900	17.6	31.8	20.8	20.7	24.8	27.9	22.6
1910	14.9	29.8	17.4	19.1	22.2	23.9	21.1

Age-constitution of the Population—The death-rate determines the age-constitution of the population. A declining death-rate means an increase in the *average* duration of life, *i. e.* its expectation. This average is

* E. B. Reuter's *Population Problems* : p. 146,

80 years when the death-rate is 12 per thousand of the population, 70 years when 14 per thousand, 50 years when 20 per thousand, under 30 years when 35 per thousand and about 20 when the death-rate is 50 per thousand. In China where the population is stationary the birth-rates and death-rates are probably 50 per thousand. In India the death-rate is between 35-40 and the expectation of life is about 25 years.

This brings about a marked contrast between the age-distributions of the population in India and in Western countries. It is, of course, difficult to make any general statement for the whole country for here, as in the case of the birth-rate, racial and regional peculiarities have great influence. It appears from the Census Report* that the tribal aborigines, among whom marriage after puberty is common and the remarriage of widows is freely practised, have a larger proportion of persons in the early age-categories and are short-lived. The Mahomedans also have a larger proportion of young children than the Hindus whose social customs are less favourable to rapid growth. The epidemics of plague and influenza have abnormally depleted the population between the ages 0-5 and 15-35 and thus caused a *relative* concentration in age-group 5-15.

The Indian figures are the result of a higher birth-rate tempered by a high infant death-rate, a lower expectation of life and greater fluctuation in the adult age-categories owing to famines and epidemics.

The following table which gives *changes* in the age-distribution from 1881 to 1921 summarises the population history for that period.

* Page 133.

	1881		1891		1901		1911		1921	
	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.
0-15	397	381	398	387	391	380	388	381	392	389
15-50	496	498	497	496	501	502	503	503	495	495
50 & over	107	121	105	117	108	118	109	116	113	116

The contrast between Indian and European conditions is brought out by the following table :—

Country.		Proportion per 1000 of the population of different countries in certain age-periods.		
		0-15	15-50	50 & over.
England & Wales	...	306	534	160
(Males 1911)				
U. S. A. (Population)	...	321	538	141
Italy	"	339	471	190
† India Males 1911	} ...	388	503	109
" 1921	} ...	392	495	113

It is impossible to exaggerate the significance of these figures from the economic point of view. The loss of adults and the low expectation of life mean low productivity. When we remember that death is preceded by a shorter or longer period of sickness and often of prostration, the resulting economic loss to the community becomes obvious.

The Rate of Growth—We have now passed under review the peculiarities of the Indian birth-rate and death-rate. It is the difference between the two rates that constitutes the *effective* rate of the increase of the population. Its *variable* nature can be seen from the following table :—*

† *Ind. Cens. Report*, 1921 : p. 134.

Year	Madras	Bombay	Bengal	U. P.	Punjab	B. & O.	C. P. & B.
1915	+ 9. 2	+ 10.98	- 1.03	13.44	+ 7. 3	+ 8. 2	+ 12.04
1916	+ 10.67	+ 2.66	+ 4.52	13.59	+ 14. 9	+ 3. 8	+ 3.09
1917	+ 6. 2	- 5.03	+ 9.72	8.17	+ 7. 4	+ 5. 2	+ 12.07
1918	- 14. 1	- 56.44	- 5. 2	- 42.48	- 41. 4	- 19. 2	- 59.36
1919	- 1. 7	- 4.63	- 8. 7	- 9.30	+ 12. 0	- 9. 6	- 8.93
1920	+ 6. 6	+ 1.63	- 2. 7	- 1.68	+ 14. 3	+ 1. 3	- 0.94
1921	+ 6. 8	+ 6.59	- 2. 1	- 5.18	+ 11. 4	+ 1. 8	- 6.11
1922	+ 9. 0	+ 8.78	+ 2. 2	+ 7.16	+ 17. 2	+ 10. 9	- 6.48
1923	+ 10. 9	+ 9.95	+ 4. 4	+ 12.67	+ 12. 3	+ 12. 0	+ 15.10
1924	+ 10. 4	+ 7.97	+ 3. 6	+ 6.43	- 3. 3	+ 6. 6	+ 11.54

N. B. + represents excess of births over deaths and—*vice versa*.

* *Statistical Abstract (Fourth Issue)*: p. 344-45.

As noted in the beginning, for a favourable decade the rate may be between 5 and 6 and for an unfavourable decade it may be between 1 and 2. This is in marked contrast with the *steady*, and in most countries *increasing*, rate of growth of Western countries as can be seen from the following table.*

	U. Kingdom	Germany	France	Austria	Spain	Italy	Eur. Russia
1870	12.2	13.1	1.7	8.3	5.6	7.2	—
1880	12.9	12.1	2.5	7.9	6.1	7.7	—
1890	10.9	12.4	0.4	8.8	4.6	10.7	22.8
1900	10.7	14.9	1.1	11.9	6.4	10.7	17.0
1910	10.5	13.3	0.4	10.8	9.3	11.2	17.0

It must be remembered that this high rate is maintained in spite of a steady flow of emigration from the United Kingdom, European Russia, Germany and Italy. Indeed emigration never *permanently* diminishes the population of the old country. The temporary void is soon filled by a *fall* in death-rate and *stimulation* of birth-rate.

Conclusion—The high birth-rate and the high death-rate prevailing in India ought to make us pause and think whether the waste of human life and the resulting misery are not avoidable. There cannot be the least doubt that the real solution of the 'problem' of Indian population is to be found in the inculcation of sound ideas as to the proper age of marriage, responsibilities

* Reuter—*Population Problems*: p. 95.

of parenthood and 'the habit of cutting our coat according to the cloth as much in this matter of progeny as in every other concern of life' as Mr. Wattal would put it.*

A *regulated* birth-rate will be followed by a *declining* death-rate. Famines, epidemics and widespread disease show that the '*positive*' checks of Malthus are operating in India with ruthless severity. An improved standard of living, better sanitation, efficient medical help, effective control of epidemics will no doubt diminish the death-rate and every effort in this direction ought to be welcomed on humanitarian grounds. But we must remember that a high death-rate is the *result* of a high birth-rate, and is not prevention better than cure?

(2) OCCUPATIONAL DISTRIBUTION—From the economic point of view the occupations of a people are as important as its numbers. Here only the broad features of the distribution will be noted. The importance of this kind of information is beyond question; at the same time the difficulties of collecting and compiling the information happen to be very great in India. Further, comparisons with data furnished by past censuses are rendered futile because of changes in the principles of classifying occupations. In the census of 1911 and of 1921 what is known as the "Bertillon System" (named after Dr. Jacques Bertillon, a French statistician) has been followed with slight modifications. According to this scheme occupations are divided into 4 *classes*, 12 *sub-classes*, 56 *orders* and 191 *groups*. The classes and sub-classes, with the numbers engaged in each per 10,000 in the years 1911 and 1921 are given below.

* *The Population Problem in India* : p. 83.

Class.	Sub-Class.	Numbers engaged per 10,000.	
		1911	1921
A. Production of Raw Material	I. Exploitation of animals and vegetation.	7,227	7,298
	II. Exploitation of minerals.	17	17
B. Preparation and supply of material substances	III. Industry	1,127	1,049
	IV. Transport	160	137
	V. Trade	569	573
C. Public Administration and Liberal Arts	VI. Public Force	77	69
	VII. Public Administration.	84	84
	VIII. Professions and Liberal Arts.	170	159
D. Miscellaneous.	IX. Persons living on their incomes.	17	15
	X. Domestic Service.	147	144
	XI. Insufficiently described occupations.	295	351
	XII. Unproductive.	110	104
		10,000	10,000

It would seem that in spite of changes in classification the numbers dependent upon land are *steadily increasing*. They were 64·5 and 67·5 p.c. in 1891 and 1901 respectively. They became 72·27 and 72·98 p.c. in 1911 and 1921. This concentration upon land is in marked contrast with the following figures taken from Prof. Brij Narayan's book.*

* Cf. His 'Population of India': Lahore, 1925.

Occupation.	India 1921	U.S. A.	England	France	Germany
1. Land, Forests, Fishing and Hunting ...	73·0	33·2	7·8	42·7	35·2
2. Industry & Mining ...	10·6	33·2	49·6	31·8	40·0
3. Trade & Transport ...	7·1	22·9	24·8	12·5	12·4
4. Public Administration & Liberal Arts ...	3·1	4·9	6·3	6·7	6·2
5. Domestic Servants ...	1·5	1·3	3·4	2·4	1·7
6. Servants living in the house of their masters	—	4·5	8·1	3·9	4·5
7. Insufficiently de- scribed ...	3·5				
8. Unproductive ...	1·0				
9. Persons living on their incomes ...	0·2				
	100	100	100	100	100

The causes of this crowding upon land have been described in the chapter dealing with the economic transition. In western countries, where a similar transition took place a few decades ago, the displaced population was absorbed in (a) capitalistic farming, (b) in organized industries or (c) let out in a stream of emigration. 'Capitalistic farming' was particularly noticeable in England. Also the rise of Industrialism

created an insatiable demand for labour in the towns that were fast growing in size. Indeed the modern social phenomenon known as the rural exodus is a direct result of industrialism. In those European countries where capitalistic agriculture and organized industries came late and made slow progress, *e.g.* in Poland, Russia and Italy, the hardships of economic transition were mitigated by a stream of emigration to the New World.

But none of these channels is available to drain off the superfluous population depending upon land in India. Capitalistic farming is yet to come. The organized industries employed only 2,681,125 persons in 1921.* Nor has the country any outlet for emigration to foreign countries or to other parts of the British Empire. Hence the crowding of the population on land as the only and precarious means of occupation and of earning its livelihood. There is enforced idleness for large sections of the population, and for a considerable part of the year.

The problem of problems, therefore, at the present time in our country is to supply some 'occupation' to a large portion of the population which is wholly or partially idle and, as a result, poor. Can we so reorganize our vast agricultural industry that it will provide sufficient work to those that take to it? Can we revive or maintain our cottage industries to keep the artisan class employed? Are there the facilities for the growth of industrialism that will absorb our population? Will not large-scale industries throw out of employment the very artisans whom we are anxious to save? How to co-ordinate the factory

* *Statistical Abstract (Fourth Issue)* : p. 631.

industries with the cottage industries so that they will *supplement* each other and not *militate* against each other? Finally, is there any necessary antagonism between industries and agriculture, so that we *must* neglect one or the other?

We shall attempt to answer these questions in Part II Chapter X of this book.

(3) MIGRATION—Another feature that illustrates the nature of the current economic transition is the internal migration of the Indian population. We have already noted that there is little or no scope for Indians to emigrate to other parts of the world. In the absence of the invigorating and quickening reaction which contact with foreign countries brings about, the people are left to shift for themselves *within* the country. This leads to the dwarfing of the outlook on life and the people—mostly agricultural—rot in the villages in which they are born. Their reluctance to move out is reinforced by the ties of the joint family and the caste and the contrast as to language, food, social customs &c. with which they are confronted when they move out. Hence the essentially home-loving character of the people. In the Census of 1921 out of the total population of 319 millions, not more than 30 millions were born outside the district in which they were enumerated, and of these 30 millions 20 millions were born in districts contiguous to the district of enumeration. This home-loving character is the result, as the Census Report says,* “of economic and social causes, and of the immobility of an agricultural population rooted to the ground, fenced in by caste, language and social customs and filled with an innate dread of change of any kind.”

* Page 83.

The Census Reports distinguish *five* types of migration: (a) *casual, e. g.*, the minor movements between neighbouring villages for family, social or business reasons. (b) *temporary, e. g.*, the migration of coolies to meet demand for labour on canals, railways and other public works. (c) *periodic, e. g.*, the seasonal movement for agricultural operations or harvesting. Thus there is a seasonal immigration of labour into the cotton-growing tracts of Berar and Khandesh and into the wheat-growing tracts of the Nerbada Valley from the neighbouring districts. (d) *semi-permanent, e. g.*, when the inhabitants of one place earn their living in another but maintain connection with their own homes and ultimately return there. (e) *permanent, e. g.*, usually in the nature of colonization. We have an example of this in the Canal Colonies of the Punjab.

Quantitatively, we might roughly divide the Indian Provinces and States into two classes according as they lose or gain in population as a result of migration. Assam, Bengal, Burma, Bombay, Mysore and the Central Provinces gain, and Bihar and Orissa, United Provinces, Madras and Rajputana lose. Let us specify the broader and more permanent streams of migration as between the different provinces of India. Immigrants are attracted to *Assam* (a) for labour on the tea-gardens and (b) for colonizing the extensive waste lands in the Valley of the Bramhaputra. The tea gardens derive the supply of coolies from the distant provinces of Bihar and Orissa, the Central Provinces and Madras, while the settlers in the Bramhaputra Valley mostly come from the neighbouring and congested districts of Mymensingh, Rangpur and Jalpaiguri. As for *Bengal*, the industries in and about Calcutta call for a

steady stream of unskilled labour from Bihar and Orissa and the eastern districts of the United Provinces. Similarly there is migration from Chota Nagpur and Nepal to the tea-gardens of Darjeeling and Jalpaiguri. On the other hand there is a well-marked stream of emigration from Bengal, one to the Assam Valley as previously noted, and the other from the Chittagong district to Burma. In *Bombay* the growing industries of Bombay, Sholapur and Ahmadabad require immigrant labour. This is partly derived from the neighbouring districts, but partly also from more distant places. There is thus one stream of immigration from Baluchistan, the United Provinces and Rajputana, and another from the Madras Presidency. We may pass over the small stream of immigration into the *Central Provinces* and *Berar* and the important Colonizing Movement in the Punjab. The immigrants to *Burma* hail from the east coast of Madras, Bengal and the United Provinces. They are attracted by the industries round about Rangoon and are only temporary residents in Burma.

Turning to the provinces that lose in population, we have first *Bihar and Orissa*. Reference has been made to the large flow of emigration to Calcutta and Assam. On the other hand the development of mining in Orissa attracts a steady stream of immigrants—skilled and unskilled. The *United Provinces* supply unskilled labour to most provinces—to Bengal, Bombay, Burma, Central Provinces and Assam. The stream of emigration from *Madras* is important and interesting. That towards Burma and Mysore is large in volume. But the Hyderabad and Mysore States, Bengal and Bombay get their own share. The stream towards Assam, Mysore, Travancore and Coorg is

mostly absorbed by the tea-gardens.

(4) URBANIZATION—One particular type of migration *viz.* from the country to the town deserves separate treatment. The essentially agricultural aspect of the country is reflected in an overwhelming proportion of the population living under rural conditions. For census purposes a 'town' includes towns having Municipalities, or Civil Lines, or Notified Areas, or Cantonments and also 'a continuous collection of houses inhabited by not less than 5000 persons.' It may appear at first sight that the limit of 5000 for a town in India is too high, for in Western countries the limit is as low as 3000 or 2000. But, as the Census Report for 1911 points out,* conditions are different in India from those in the West and many towns of 5000 or more are 'overgrown' villages. In the West, on the other hand, smaller aggregations of the population have all the advantages of urban life, *e. g.*, schools, public institutions and the like.

In the census of 1921 out of a total population of 319 millions only $32\frac{1}{2}$ millions or 10·2 p. c. were enumerated in towns and cities, the remaining being villagers. The proportion of town-dwellers varies in different provinces, being 23 p. c. in the Bombay Presidency and 3 p. c. Assam. We may contrast these low figures with 79 and 44 which represent the percentage of town-dwellers in England and France respectively.

The explanation of our backwardness lies in the small progress we have made in organized industries. In the West the most powerful incentive to urbanization has been furnished by the growth of trade and

* p. 30.

industries in the towns. In India internal trade developed incidentally to external trade and as a consequence those ports and those inland towns that had railway facilities for participating in the import and export trade increased in size while the other ports and inland towns languished. Of purely 'industrial' towns we have few and far between.

To illustrate: The growth of Karachi, Bombay, Madras, Calcutta, Rangoon and Tavoy is due to their participation in the external trade. Calcutta and Bombay are the centres of the jute and cotton industry respectively. Madras industrially is not of much importance though it has two up-to-date textile factories, nor is Karachi. Rice-milling is an important industry at Rangoon. Among important minor ports we may mention Calicut, Tuticorin, Negapatam, Coconada, Cuttuck, Chittagong and Moulmein. Of the *inland* towns, Cawnpore, Delhi, Amritsar, Agra, Lahore, Benares, Lucknow, Mirzapur, Hyderabad (Dn.), Jaipur are of great *commercial* importance as distributing centres for imports or collecting centres for exports or both. Cawnpore (cotton and leather), Ahmedabad (cotton), Bangalore, Nagpur (cotton), Jamshedpur (steel), Sholapur (cotton) are seats of organized industries. Delhi, Agra, Benares, Madura, Gwalior, Jaipur are also the centres of Indian handicraft industries like weaving, embroidery, metal work, stone work, etc.

The relative growth in towns of various sizes can be seen from the following table:—

Table showing number of towns of different sizes and the percentage of urban population living in them from 1891-1921.

Towns	Number				per cent. of population			
	1921	1911	1901	1891	1921	1911	1901	1891
Over 100,000	35	30	31	30	2.6	2.2	2.2	2.2
50,000 to 100,000	54	45	52	48	1.1	1.0	1.2	1.1
20,000 to 50,000	199	180	166	148	1.8	1.8	1.7	1.6
10,000 to 20,000	450	442	471	407	2.0	2.0	2.2	1.9
5,000 to 10,000	885	847	856	896	2.0	1.9	2.0	2.1
Under 5,000	690	605	569	505	.7	.6	.6	.6
Total Towns	2313	2150	2145	2034	10.2	9.5	9.9	9.5
Total Villages	685,622	720,342	728,605	713,925	89.8	90.5	90.1	90.5

* *Ind. Dem. Report*, 1921: p. 65.

It will be seen from the table that the number of towns between 5000-20,000 and over 50,000 in 1901 was actually greater than in 1911. The set-back to the growth of towns was no doubt due to the ravages of plague which was particularly virulent in the towns. The towns slightly recovered after 1911, but then came the Influenza a few years later which has left its mark upon the urban, as well as rural, population.

It will be also seen from the table "that while the towns with populations above 50,000 have increased by over 16 p. c. in the last decade, the increase has been considerably less in those between 5000 and 50,000, while the population of the towns between 10,000, and 20,000 has not kept up with the progress of the general population of the country. The significance of these comparisons lies in the strong indication which they give of the gradual decadence of the medium-sized country-town, and the growth of the larger cities and towns under the influence of commercial and industrial development."*

Nor do the figures suggest any general depopulation of the countryside about which a cry is sometimes raised.

Though the big cities have become bigger, an examination of the following table will show that there are many alarming features of this increase.

* *Ind. Gen. Report*, 1921 : p. 66.

City.	Percentage increase in the period 1872-1921	Proportion of foreign-born per 1000	Number of females per 1000 males	Infant mortality per 1000 live births	Death rate per 1000 in 1924
Calcutta	—	629	500	386	29·6
Bombay	+ 82·5	840	524	556	33·44
Madras	+ 32·5	335	908	282	41·9
Rangoon	+ 246·4	677	444	303	33·13
Karachi	+ 282·2	605	629	249	30·32
Delhi	+ 75·5	450	672	283	30·54
Ahmedabad	+ 113·2	397	763		39·83
Lucknow	— 12·9	229	774		43·54
Patna	— 24·5	160	824		23·9
Poona	+ 48·8	373	813		45·56
Lahore	+ 79·2	440	571		45·06

From this table we may draw the following conclusions as to the nature and extent of urbanization in India. (a) Not only some of the big cities have grown very rapidly, but the large proportion of the foreign-born element in them bears testimony to their cosmopolitan character. This proportion is as high as 629 per thousand in Calcutta, 605 for Karachi, 677 for Rangoon and 840 for Bombay. It would almost

* *Ind. Gen. Report*, 1921 : p. 72.

appear that towns are progressive and expansive in exact proportion to their cosmopolitan composition. Towns where this proportion is small, *e. g.*, Surat (183 per 1000), Patna (160 per 1000), Jaipur (63 per 1000), Benares (140 per 1000) and many others show that the economic transition is taking place in them very very slowly. The higher the proportion of the foreign-born, the more migratory is the character of the populations in the towns.

(b) This is borne out by the low proportion of females to males in these urban populations. The disparity has been particularly noticed in the case of Calcutta and the industrial suburbs that are springing round about it. The disparity means that the immigrant labourers coming to the town for temporary employment are compelled to live under unnatural conditions and are exposed to grave social evils. It is also a partial cause of their inefficiency, for the labourers have no heart in their work and are always hankering after returning home. "Similar conditions obtain in Rangoon whose cosmopolitan population has a sex-ratio of 444 females per 1000 males and contrasts conspicuously with that of the resident Burmese town of Mandalay, where there are as many as 915 women to every 1000 men. Though the industrial towns of the Bombay Presidency have a large foreign population immigrant labour is of a more permanent nature than in the eastern industrial tracts and there is more employment for women. Bombay itself has 524 females for 1000 males, and the ratio in Karachi is 629, in Ahmadabad 763 and in Sholapur 894."*

* *Indian Cen. Report* (1921) : p. 72.

(c) Closely connected with the migratory proportion of the urban population is the evil of overcrowding to which only a passing reference need be made here. Bombay is the worst offender in this respect and even the Census Report admits* that conditions there are far worse than in London. In the worst section of Bombay—the Sewri Section—no less than 96 p. c. of the population lives in one-room tenements with 5 persons per room. Karachi is even worse than Bombay and Ahmedabad little better. Though in parts of Calcutta ‘conditions of over-crowding are unimaginable until they have been witnessed’† the evil is not so serious as in Bombay.

(d) The deplorable housing conditions result in the spread of drinking, disease and vice and ultimately augment the death-rate. In Bombay, for instance, during the decade 1911–20 there was a steady excess of deaths over births every year though the statistics are defective. “Madras city has the unenviable notoriety of having a higher death-rate than any district of the Presidency, the death-rate being higher than birth-rate by 11·7 p. c.”‡ Reference has already been made to the appalling infant mortality in the larger towns and cities. People immigrating to the towns for employment not only shorten their own lives but sacrifice that of their children. This can hardly be regarded as a satisfactory state of things from the national point of view.

(5) DENSITY OF THE POPULATION:—We finally come to the density of the population which is at once the resultant of its growth, migration and industriali-

* p. 77. † *Ind. Cen. Report* (1921): p. 74.

‡ *Ind. Cen. Report* (1921): p. 76.

ization. As comparisons are frequently made between populations of different countries according to their densities (*i. e.* the number of inhabitants per sq. mile) it is worth while enquiring into the causes of this density. For the whole of India this density is 177, the mean density in the British provinces being 226 and in the States being 101. Figures for other countries are given in the margin.*

Belgium	654	It is obvious that population is sparse in new countries like the U. S. A. and New Zealand. In the older countries the determining factors, in addition to physical environment, are the progress made by a people in utilizing its material resources for its maintenance and growth, and secondly, its standard of living. We should distinguish two stages in that progress: the agricultural stage and the commercial and industrial stage. In the agricultural stage the population is determined by the supplies of food it is able to grow on the area that is at its disposal. In the commercial and industrial stage it is able to exchange the products of its industry for food grains from neighbouring or distant countries and then there is no obvious limit to the density it may reach in a particular tract or country.
England & Wales	649	
France	184	
Germany	332	
The Netherlands	544	
Austria	199	
Spain	107	
Japan	215	
U. S. A.	32	
New Zealand	11.8	

In a predominantly agricultural country like India density mainly depends upon the productivity of the soil. A limiting factor in productivity is the rainfall. But the areas of maximum rainfall are not of maximum density for we must take into account other factors,

* *Ind. Gen. Report* (1921): p. 5.

e. g., the configuration of the surface, the plains being more thickly populated than the hills; climate, the prevalence of malaria owing to excessive dampness being a deterrent factor in Assam, the United Provinces East, and Punjab East and North.

Variations in physical aspect, rainfall and fertility, and climate explain the very unequal distribution of the population over the surface of the country. Thus about one-third of the population occupies more than two-thirds of the area of the country, while one-sixth of the area is occupied by half the population at a density of over 350 persons per sq. mile. The provincial distribution is as follows* :—

Province or State	Percentage of area to total area	Percentage of population to total population	Density per sq. mile	
			Province	States
Bengal (with States)	5	15	608	165
U. P. "	6	15	427	191
Madras "	8	13	297	511
Bihar & O. "	6	12	409	138
Bombay "	10	8	157	117
Punjab "	8	8	207	119
C. P. & Berar	7	5	139	66
Burma	13	4	57	...
Hyderabad State	5	4	...	151
Rajputana Ag.	7	3	...	76
Assam (with States)	3	3	143	45
Central India Agency	3	2	...	116
Mysore State	2	2	...	203
N. W. Fr. Prov.	2	2	168	...
Travancore State	—	1	...	...
Kashmir "	5	1	...	39
Gwalior State	2	1	...	121
Baroda State	—	1	...	262
Baluchistan	8	—	8	5

Though the country is mostly agricultural, in certain parts of Eastern Bengal, United Provinces and Bihar the density ranges from 600 to 1100 per sq. mile. It has been observed that in the West agriculture by itself is not able to support a density of more than 250 per sq. mile. The explanation of the excessive density is to be found partly in the inexhaustible fertility of those regions and partly in the simplicity of the standard of living of the population concerned. The question of the *pressure* of population on the means of subsistence is a complex one and is better postponed for consideration at a later stage when other factors in the problem will have been examined.

CHAPTER VI

TRANSITION IN SOCIAL INSTITUTIONS

We may say that the life of a vast majority of Indians moves in three rings, each placed within the other: the Joint Family, the Caste, and the Village. Each of these institutions, however, is reacting to the economic transition that is taking place in the country and it is proposed to study here the nature and extent of this reaction.

(1) THE JOINT FAMILY—A Hindu joint family has been defined as "a group of individuals related to one another by their descent from a common ancestor within seven generations of the descending line." The members composing the family live under the general control and dispensation of the head or *pater familias* and are 'joint in food, worship and estate.' The joint family is peculiar to the pastoral and agricultural stage in the economic development of a people, and as such it prevailed among the Israelites, the Greeks and the Romans. The peculiarity of the Hindu joint family lies in its long-continued existence, in its notion of perpetuating the family and at the same time maintaining the purity of blood, and in its thus giving rise to the larger aggregate, the caste or sub-caste. The head of the family thinks it obligatory upon him to marry the younger members of the family at their proper age, to offer oblations to the manes and to propitiate the tutelary deities. Thus the supreme object of the Hindu joint family in its

spiritual aspect is "to perpetuate a family, a patrimony and a faith."*

It cannot be denied that this institution is an excellent school for discipline, inculcating the virtues of self-sacrifice and obedience to and service of elders. In its economic aspects, the joint family has some advantages in production. All members of the family take their share of domestic work. They are also useful, when belonging to a cultivator's family, in agricultural operations, and when belonging to an artisan's family, in various operations connected with the craft. Thus the youngsters are spontaneously educated in the little secrets of their crafts. In the enjoyment of wealth also, the joint family has an advantage as it makes for economy. The joint income is shared by all the members, not according to the contribution each makes to it but according to his (or her) need. The widowed and the orphaned, the disabled and the aged are duly looked after. Thus the joint family dispenses with the necessity of poor relief at public cost.

But here its advantages end. From the point of view of population, by encouraging early marriages it aggravates an evil for which by providing shelter to the widow and the orphans it supplies only a partial remedy. The subject of child-marriage and infant-mortality has been already dealt with. By assuring to every member his proper share of food, clothing, etc., it encourages lethargy. The position of widows in the joint family is often deplorable. Mutual jealousy is engendered and domestic squabbles—and often bitter feuds—follow. It deadens individual initiative and ambition. It militates against the accu-

* Prof Mukerjee's *Foundations of Indian Economics*: p. 18.

mulation of wealth by frittering it away in numerous religious ceremonies connected with the family or the caste.

Many disintegrating forces are assailing the joint family at the present moment. The way in which the Hindu Law of Inheritance has been interpreted and applied by Anglo-Indian judges has struck at the root of the joint family. This law differs as it belongs to the *Dayabhag School* (prevailing in Bengal) or to the *Mitakshara School* (prevailing in the United Provinces, Bombay and South India). But the tendency of both the Schools is to encourage partition of estates—landed as well as self-acquired. In the case of lands partition is attended with a great deal of litigation, and with the evils of subdivision and fragmentation to which reference will be made later on. In the case of houses the partition is often effected with such fantastic sense of distributive justice as to destroy the utility of the house. Every partition means a dismemberment of the joint family. Again the advent of commercialism and industrialism has loosened the bonds of the joint family. New ways of acquiring wealth, *e. g.*, by trade, industry, government service, professions, etc., have been opened out and the wealth thus acquired can be invested not in lands only, but in business enterprize of various forms, stocks and shares, government paper, houses, etc. The joint family is thus not always bound to the land as formerly. After the death of the founder it is soon broken up. Finally, Western education has brought with it a spirit of individualism, an impatience with paternal discipline, a diminution of faith in the common worship of the family deities and all these have affected the solidarity of the joint family.

To what extent is the joint family being broken up? Evidence is not conclusive on the point. As the Census Report points out, the number of persons 'per house' has declined since 1881 as can be seen from the marginal table.

Year No. of persons
 per house

1881	—	5·8	But the definition of a 'house'
1891	—	5·4	was not uniform from census
1901	—	5·2	to census or from province to
1911	—	4·9	province. The generally accepted
1921	—	4·9	definition is based upon the social

aspect, *i. e.*, a house is 'the home of a commensal family with its resident dependants and servants.'* But in the earlier censuses, and even now in some provinces the 'structural' definition of a house was adopted, according to which a house was defined as 'the residence of one or more families having a separate independent entrance from the common way.'† This criterion of a house is not suitable. Even accepting the first definition of a house as a commensal family, we cannot say whether it is declining in size. The opinions of the provincial Census Superintendents is that the joint family has not yet undergone any radical change, at any rate in the rural areas. As the Census Commissioner says,† "The two main influences, the domestic and the economic, seem to operate in opposite directions. Labour and resources generally are more easy to combine and organize when the family remains joint and the economic considerations probably tend to hold the families together. On the other

* *Ind. Cen. Report* (1921): p. 46.

† *Ind. Cen. Report* (1921): p. 46.

hand it is not easy for a large group of married brothers and sisters to dwell together in peace and concord, and domestic considerations probably make for disruption. The general consensus of opinion is that the disruptive tendencies are strongest in the professional and educated class and in urban areas".

(2) THE CASTE SYSTEM—The ring of the joint family revolves upon the ring of the caste which is nothing but a collection of such families or joint families as can inter-marry and inter-dine.

The Indian population is divisible according to religion into the following communities. The *Parsis* (102,000 in number) form a small but compact and progressive minority in the Bombay Presidency. The *Mahomedans* (about sixty-nine millions) are scattered over the whole country and fall into four tribal divisions: the Moghuls, the Pathans, the Saiyids and the Sheikhs, together with a miscellaneous group. The last comprises most of the Hindu converts to Islam who have more or less completely retained their caste or functional exclusiveness. The *Indian Christians* (4·5 millions, particularly numerous in South India) also retain (in their lowest and highest groups) their former caste distinctions. Among the *Sikhs* (about 32 lacs in number) who are a protestant sect of Hinduism in the Punjab, some retain their former caste but most merge themselves in the khalsa, *i.e.* the Commonwealth. Then we have the *Budhists* (11·5 millions) mostly in Burma, and the *Primitive* and aboriginal population (9·8 millions) scattered in the forests and mountainous regions. The caste system is peculiar to the *Jains* (12 lacs) and the *Hindus* (217 millions). As the Hindus constitute three-fourths of the entire

population the significance of the caste system as a social and economic institution becomes obvious.

Like the joint family, the caste system also is in the maelstrom of Western influences. We are not concerned here with the origin and development of this system which are interesting subjects from the sociological and ethnographic points of view. Economically, the caste system cuts up the Hindu Society (and, indirectly, the whole Indian Society) into separate groups which play different rôles in the production of wealth and which possess distinctive modes of living as to food, clothing, etc. In the Hindu community we have first the four traditional *Varnas* or Classes (the Brahmins, the Kshatriyas, the Vaishyas and the Shudras with a fifth class of the Ati-Shudras or the Asprishyas or the Untouchables). Each *Varna* may have many *Jatis* or Castes. The relation between a *Varna* and a *Jati* is not that of parent to child, but of family to species. The caste itself is difficult to define, but its two most characteristic features are endogamy and commensality, *i. e.* inter-marriage and inter-dining. We may then define a caste in the following words of the Census Report of 1911.* "A caste is an endogamous group or collection of such groups bearing a common name and having the same traditional occupation, who are so linked together by these and other ties, such as the tradition of a common origin and the possession of the same tutelary deity, and the same social status, ceremonial observances and family priests, that they regard themselves, and are regarded by others, as forming a single homogeneous community."

* *Ind. Cen. Report* (1911) : p. 367.

The same spirit of exclusiveness that separates one caste from another further differentiates a caste into sub-castes and the process may go to an absurd limit. These sub-divided groups under new surroundings form new combinations so that it would be wrong to imagine that the caste-system has any cast-iron rigidity about it. The frame-work of the four Classes is no doubt rigid, but within the classes the castes and sub-castes are in a process of flux, combining and differentiating, absorbing within them others also who in course of time may insensibly acquire the marks of Hinduism. This absorption of new elements into the Hindu fold and their assimilation with or differentiation into castes or sub-castes show that the system is even now a vital thing.

We said just now that the chief bond of a caste is common occupation. But we have other types of castes as well and Sir Herbert Risley's classification is even now useful. Thus there are (a) tribal castes, *i.e.* formed by those tribes that have insensibly adopted Hinduism and its social ordinances, *e.g.* the *Jats* of the Punjab, and the *Kolis* of Bombay. (b) Functional or Occupational castes. (c) Sectarian Castes, where the tie is furnished by peculiar religious tenets or practices, *e.g.* the *Lingayats* of the Bombay Presidency or the *Khalsa* of the Punjab. In such cases there is secession from Hinduism by way of protest, but the caste-system still lingers in them. (d) Castes of the national type like the *Marathas* in the Bombay Presidency. (e) Castes formed by crossing. (f) Castes formed by migration. (g) Castes formed by change of custom or occupation.

We may summarise the general result of the caste system in the following words from the Census Report

of 1911* "Caste involves numerous restrictions on occupation, marriage, eating and general social intercourse. A man must not marry a woman belonging to another caste or to certain defined sections of his own caste. He must not eat or drink with persons of inferior castes, or in some cases, with any persons outside the limits of his own community. He must abstain from food regarded by his caste fellows as impure, from acts (such as the marriage of widows) regarded as improper, and from occupations considered to be degrading. He must observe the customary ceremonies in connection with marriage, or the occurrence of a birth or death. He must respect the rights of his caste fellows, and in particular he must not filch their regular customers from them".

Not that such or similar restrictions and distinctions do not prevail in the West. But these differences are largely a matter of *personal* prejudice which it is at the option of the individual to observe or ignore at his own pleasure. In India they are enforced by rigid rules laid down by the community as a whole, the breach of which is visited with severe penalties in the form of purificatory or expiatory penance, fines, social boycott, or in extreme cases, formal excommunication.

The perfect forest of castes and sub-castes has led the Census Commissioner of 1921 to divide them into three broad classes:† (1) the Brahmin at the top (about 14 millions); (2) the Depressed classes (roughly between 55 to 60 millions) and the tribal and primitive elements (about 6·5 millions) at the bottom; and between the two (3) a comprehensive Non-Brahmin class (about 143·5 millions) including the cultivating,

* *Ind. Gen. Report* (1911): p. 387.

† *Ind. Gen. Report* (1921): p. 226.

professional and higher artisans and a certain proportion of the lower artisans and the labourers.

Though this way of presenting the composition of the Hindu Society is useful it would be wrong to infer from it that the three classes are homogeneous. As a matter of fact, the grounds that separate the castes, and the sub-castes especially, are often the most superficial, accidental and ludicrous, and yet the fragmentation of the society is a reality. Sir Bamfylde Fuller put this picturesquely* when he said that by the caste system the inhabitants of India are differentiated into two thousand species of mankind, which in the physical relations of life have as little in common as the inmates of a zoological garden.

What is the effect of this social structure upon the production of wealth? So far as caste determines one's occupation and so far as that occupation depends for its success upon the possession of some craft secret, the young casteman has a distinct advantage. But we have already seen that the Indian handicrafts are decaying, so that the traditional skill is of no avail to the young craftsman and is more often a hindrance than an advantage. Again the castes, like the craft guilds in Mediæval England, secured excellence in workmanship which was fostered by different sub-castes specializing in different arts and crafts.

But just as the joint family is the concomitant of the agricultural stage, the caste-system (which is the Indian variant of the craft-guild) is the concomitant of the handicraft stage and both are giving way before the advent of industrialism. Large-scale production implies the massing of labourers in factories and their

* *Indian Studies*: p. 41.

direction and control by the 'captains of industry.' This means a homogeneous labour supply and its co-operation with capital. There are imperceptible gradations of labour and a capable workman can rise from the lowest to the highest position. In India caste makes the supply of labour heterogeneous. One's occupation and position in life are determined by the accident of birth. People take to certain occupations because they are *born* in them, and not because they are fitted for them by physical or mental qualities. There is thus an incalculable waste of labour. The healthy spirit of competition is absent. The caste tells to each man: "You shall remain where you were born", and thus seems to arrogate to itself more authority than Canute did when he bade the ocean: Thus far and no further. Caste restrictions affect the mobility of labour not only as between occupation and occupation, but as between place and place. The worker is unwilling to leave his family and caste surroundings in the village for employment in the town. If he migrates at all, he returns to the village too frequently to develop the habits of steady application. This is one cause, among others, of the inefficiency of Indian labour.

Nowhere has the caste system proved itself more harmful than in its failure to adapt itself to the new conditions created by modern methods of trade, transport and industry. We suffer at both ends of the caste-system. The higher and educated castes at the top won't take themselves to industry because of a false notion of superiority and aversion for manual work. As a result they overcrowd the professions and clerical employments and are now faced with the problem of unemployment. The Depressed Classes at

the bottom are, on the other hand, excluded from all honourable employment.

Again, in India there is little co-operation between the classes that furnish labour, capital and direction respectively to industry. There is a hiatus between the intellectuals and the capitalists and both hold themselves at an arm's length from the classes that furnish labour.

The caste system is equally harmful in the domain of consumption. It no doubt provides some rough measure of protection and relief to the widows and orphans of the castemen. This spirit of service and help *within* the caste is a powerful cause that keeps the system alive. But in other ways the system is wasteful. Each caste and sub-caste has peculiarities of food, clothing, ornaments, cooking vessels, etc., so that these articles have necessarily to be produced on a small scale by local artisans of each caste. Our handicrafts survive because in many cases they cater for these highly specialized and peculiar wants of the caste. A greater standardization in our requirements of food, clothing, furniture, etc., will not only break up the caste system but also kill many of our handicrafts. The imported articles are more standardized and they have contributed as much to the obliteration of the *outward* differences of the castes as to the decay of our handicrafts.

Again, nowhere caste rules operate with greater force than in the celebration of marriages and in the observance of funeral and *Shradha* ceremonies. On account of caste restrictions heavy prices have to be paid for securing suitable bridegrooms (and in some castes, brides) and the feasts, etc., incidental to the marriage ceremony mean a lot of extravagance

(*relatively*, of course, to the purse of the person concerned). The castes enjoin early marriages and, therefore, foster widowhood. Early marriages and perpetual widowhood are the worst sins of the caste system. Marriages and other ceremonies (at any rate the extravagance they encourage) constitute a deduction from a rational enjoyment of one's wealth. In many cases they are the initial cause of incurring debts and the source of perpetual embarrassment.

Finally, the lower castes have been inured to such a poor mode of living as to food, clothing, housing, etc., that though their incomes have lately increased, caste restrictions have come in the way of their using better quality of food, and the like, with the result that a considerable part of their enhanced income is wasted in drink, gambling and vice. They spend more, but in foolish, improvident and harmful ways, to the detriment of the health and efficiency of themselves and of their children.

Thus from the point of view of the production and use of wealth the caste system is a most unsatisfactory form of social structure. It lacks adaptability. It represents a social organization whose joints are ossified, as it were. It narrows one's interest in life and outlook on life and its possibilities. It is inconsistent with the spirit of nationality, and of humanity.

Are there indications that the caste system is breaking up? Here, as in the case of the joint family, the forces are conflicting, and the evidence is inconclusive. Education and social intercourse are probably rubbing off the *external* angularities and excrescences of the system. But there are no indications of a general fusion of the castes. Probably there is greater fusion

between the sub-castes. But the main castes still remain severely aloof from each other. As for *inter-communal* fusion there is no indication whatsoever. Current politics have reacted adversely on inter-caste and inter-communal relations. As the Census Report says:* "There is a growing caste consciousness accompanied by a feeling of caste patriotism on the one hand, and by intense caste jealousy and antagonism on the other".

The caste system must give way to a social structure that is more homogeneous, more plastic, more mobile, possessing a stronger desire for its economic betterment, and inspired by a loftier national and humanitarian outlook of life.

(3) THE VILLAGE—Reverting to the analogy given on a former page, the rings of the joint family and the caste revolve within the ring of the village. This is so for the vast majority of the rural population. The village is the unit of economic life throughout the length and breadth of the country. It is so convenient for administrative purposes also that Government *create* villages where none exist before. We are not concerned here with the origin of Indian villages and their varying types—a subject of great historical importance, particularly from the point of view of comparative politics. Taking villages as they exist Mr. Baden Powell distinguishes between their two types, according to their system of land tenure: the ryotwari village, and the joint or landlord village. In the former land is held *separately* by the cultivating proprietors themselves though some may have tenants under them. This type of village obtains in the Bombay Presidency, Berar, Central India and

* *Ind. Cen. Report* (1921) : p. 231.

Madras. It also prevails in the Central Provinces and Bengal, though the class of Malguzars (revenue farmers) in the former and of Zamindars in the latter has been superimposed upon the original village community. In such villages there is a village headman variously styled as *Patel* in Bombay, Berar and Central India, as *Mandal* in Bengal and as *Reddi* or *Natamkar* in Madras. In addition to the headman and the accountant (variously styled as *Kulkarni* in Bombay, *Karnam* in the South and *Patwari* in Bengal) there is a staff of menials and artisans. "The staff varied with the locality and size and wealth of the village. In Western and Central India the ideal staff was supposed to consist of twelve (*i.e.*, the *Bara Balute*, *i.e.* village servants, in Marathi, sometimes contrasted with the *alute*, the official headman, Kulkarni, etc.). The artisans included the carpenter, potter, blacksmith, cobbler, barber-surgeon, washerman, etc. Such servants are usually hereditary and are never paid by the job; they are given houses in the village, and perform all services for the residents (who only provide, or pay for, the *materials* employed). Their labour is rewarded by regular annual remuneration (of service land, or an allowance in cash, grain, clothes, tobacco, etc.) paid at the harvest."*

In the joint or landlord village, there is, above the cultivating tenants, either a single landlord or a landlord joint family which is the proprietor of the entire village area. Such a village also has its own complement of artisans and menials. These servants hold their house sites from the proprietors whom they pay small dues in cash or kind. In such

* Baden Powell's *Land Revenue and Tenure in British India* : p. 69.
2nd Edn.

villages there is no headman, but the affairs are managed by a *Panchayat*, i.e., a council of five (or the elders).

There are innumerable variations of these two types but what distinguished all before the advent of British Rule was their internal solidarity and external isolation from the rest of the country. The villages managed their own affairs in their own councils and by their own local officials. The early British officials, e.g., Metcalfe and Elphinstone who noticed approvingly their existence described them as 'autonomous republics'. Thus Elphinstone, in his celebrated 'Report on the territories conquered from the Peshwa' said:* "These communities contain in miniature all the materials of a State within themselves, and are almost sufficient to protect their members, if all other governments are withdrawn. Though probably not compatible with a very good form of government, they are an excellent remedy for the imperfections of a bad one; they prevent the bad effects of its negligence and weakness, and even present some barrier against its tyranny and rapacity." And Sir Charles Metcalfe, in his famous minute of 1830 said† "The village communities are little Republics, having nearly everything that they want within themselves, and almost independent of any foreign relations." But their local autonomy was destroyed when the British established a strong centralized system of land revenue and judicial administration. Even Sir Theodore Morison admits‡ that such a system 'by taking charge of the functions previously discharged by the village *Panchayat*

* See R. C. Dutta's *India under Early British Rule*: p. 346.

† Cf. Dutt: *Early British Rule*: p. 386.

‡ His *Economic Transition in India*: p. 38.

weakened the springs of local autonomy, and the Local District Boards, established later, have probably proved no substitute for the narrower but more vigorous self-government of the village."

If administrative centralization has struck at the root of local autonomy of the villages, the economic transition has made inroads upon their internal solidarity and external isolation. We need not repeat here what has been said (pp. 40-44) with regard to the effects of imports and exports upon village economy. We may summarise those effects in the following words of the Indian Census Report 1911 :* "The rising spirit of individualism, which is the result of modern education and western influences, is impelling the classes who perform the humbler functions in the economy of village life to aspire to higher and more dignified pursuits. There is also a tendency to replace the prescriptive yearly remuneration by payment for work done... Improved means of communication have greatly stimulated migration and the consequent disruption of the village community, and by facilitating and lowering the cost of transport of commodities, have created a tendency for industries to be localized."

The extent of transition has been different in different villages according to their size and proximity to railways or large towns. No generalization is possible or useful. No subject is more interesting than a 'realistic' study of such changes in selected villages. We have got valuable studies of this kind made by Dr. Mann (Two Deccan Villages), Dr. Gilbert Slater (Some South Indian Villages), Mr. Ranga (The Deltaic Villages on the East Coast), Prof. Lucas and Mr. Balla (Villages in the Punjab).

* *Ind. Cen. Report* (1911) : p. 409.

PART II

PRODUCTION

CHAPTER VII

THE RIGHT AGRICULTURAL POLICY *

(I) CRITERIA OF THE RIGHT POLICY—Whether food-grains and raw products are to be raised in India for local consumption, or preferentially for the Empire or freely for the rest of the world, an increase in their quantity and improvement in their quality must be the chief objective of our agricultural policy. Let us consider, therefore, at this stage, the general principles on which this policy should be based. In the West the Great War has shown the fundamental importance of agriculture to national economy and safety. England, for instance, now realizes the grave implications of her dependence upon foreign countries for food-grains, and supreme efforts are being made in that country to maximise the production of food. The greatest advocate of the policy of increasing food production at *any* cost is Sir A. D. Hall, at one time the Director of the well-known Rothamsted Station for Agricultural Research in England. In his book *Agriculture after the War* he has elaborated a comprehensive programme for agricultural improvement containing these five items. (a) The creation of extensive farms

* For a detailed discussion read Chapter III "Criteria of Agricultural Policies, etc." of my *Economics of Agricultural Progress*.

of any thing from 2,000 to 10,000 acres which are to be organized and managed as business enterprizes. (b) The creation of colonies of small cultivators that are to be supplied with all the facilities that result from Co-operative association. (c) Intensification of agriculture under the system now prevailing in England. (d) Reclamation of large areas that are at present regarded as uncultivable but are capable of improvement. (e) Provision of subsidiary occupations to those engaged in agriculture. So anxious is Sir A. D. Hall for the increased production of food-grains in England that he would offer bounties for the encouragement of the agricultural industry and would, as a final measure, take all land under State management and control.

This proposal of Land Nationalization raises important issues with regard to the agricultural policy of a country. But are there not other considerations equally important with the *maximum* production of food that have to be kept in view when we deal with problems connected with land? As is well known, land as a factor of production has three characteristics: it is a free gift of Nature, it is limited in quantity, and it is indestructible. Though it is capital from the *economic* point of view, it differs from it in ways that become important from the *social* and *political* points of view. I cannot find a better statement of the various considerations to be kept in mind when dealing with land than what is contained in the following extract from Sir J. A. R. Marriott's "*Economics and Ethics*".* The land policy of a country is not always judged with

* *Economics and Ethics* : p. 41.

reference to the primary function of land, *viz.* the yielding of food. It is expected to subserve purposes other than purely economic: "Of other criteria commonly suggested, the following are samples: Does the system of land-tenure promote a sound organization of national life? Does it contribute to the social contentment and general well-being of those classes of the community which live and labour upon land? Does it breed and maintain a population—sound in body and mind, and sufficiently numerous to supply the rapid wastage of the great industrial centres? Does it increase the stability of the social fabric and buttress the structure of the State?"

It is clear then that the land policy has to satisfy different ends of the society. Sir J. A. R. Marriott would put them thus: * "*Politically*, it is important that the land of the country should produce the maximum amount of food of which it is capable, without too much regard for the cost at which it is produced. *Socially*, it is important that the ownership should be so diffused as to give the maximum degree of stability to the Commonwealth, and at the same time contribute to the happiness, satisfaction and general well-being of its individual citizens. But *economically*, the community is interested in the home-production of food and other raw materials only in so far as they can be produced at home more cheaply than they can be bought from abroad. If this latter condition be not fulfilled it might be to the public advantage, from the purely economic standpoint, that every acre of agricultural land should become derelict". Sir J. A. R. Marriott

* P. 44.

insists that the three issues should be kept distinct, though in determining the final policy with regard to land due weight should be given to each, to the requirements of national defence as much as to the considerations of opulence, of social contentment, and of individual happiness. As he puts it, the main issues have been indicated 'in order to emphasize the argument that it is essential to the formation of a right judgment to study these questions in the dry light of the laboratory, and in scientific isolation, before the considerations appropriate to each aspect of them be combined in the synthesis which should guide opinion and inspire policy.'*

It is not difficult to refer to countries that have emphasized one or the other aspect of the land policy. We may instance *Germany* before the War as a country that directed agricultural policy on *political* considerations, *i.e.*, with a view to making the country self-sufficient in the matter of food-grains and other agricultural requirements of War. In *Ireland*, on account of the state of agricultural depression and the conflict between the alien landlords and the Irish tenantry, the *social* aspect of agriculture engrossed the attention of British Statesmen and Irish Reformers. In 1881 Mr. Gladstone, by his well-known measure, conferred the three F's—Fair Rents, Fixity of Tenures and Free Sales—on the Irish peasantry. It became evident, however, that no legislation would permanently solve the problem of Irish poverty which did not aim at converting the Irish *tenants* into independent *proprietors*. Hence the series of measures beginning with the Ashbourne Act of 1885 which, at

* Page 45.

a total cost of nearly 200 million £s, has converted a rack-rented tenantry into a prosperous peasantry. In *France* property in land is diffused. The French population is nearly stationary and hence the problem of feeding it on what the country produces is not very difficult. In that country, therefore, the *scientific* aspect of agriculture, *i.e.*, the maximum production of wealth from land, has engaged the attention of the people. In the *United States of America*, the vastness of the country and its industrial development have thrown into the back ground both political and social considerations; and scientific agriculture has made most progress. In that country we have a harmonious combination of industry and agriculture. Its goal is the most productive use of natural resources and a proper balance between extractive, commercial and manufacturing industry.

(2) APPLICATION TO INDIAN CONDITIONS—What lessons shall we derive from these examples? Our country resembles the United Kingdom in the density of the population, but we have neither her industries nor an Empire to absorb our increasing numbers. We resemble Ireland of fifty years ago in her poverty, but have none of the Celtic faculty for agitation for the redress of political and economic grievances, and are too far removed from England to loom large in her politics. Nor have we the facilities for emigration which Ireland had. We resemble France in the wide diffusion of landed property but there cannot be a greater contrast between the thrifty, industrious and intelligent French *cultivateur* and the improvident and stolid Indian *Ryot*. We resemble the United States in their vastness and natural resources, but in the place of a mobile and enterprising population that makes

the most of the gifts of Nature, we have a population that is the *debris* of five thousand years of foreign invasions and internal commotions and that has not thought worth its while to utilize the generosity of Nature for material purposes. As some one has said, we are a poor people inhabiting a rich country.

It is clear that the *political* aspect of the land problem need not exercise our minds. It is in manufacturing industries that our dependence upon others, as shown before, is woeful, and may become disastrous in a period of international crisis. In agriculture we meet the demand of the home market and have to make large exports to foreign countries. With us the *social* aspect is important; but equally important is the *scientific* aspect of increasing the productivity of land.

(3) HISTORY OF THE POLICY OF THE INDIAN GOVERNMENT—What has the Government of India done in the past to promote these two ends of agriculture? We may say that it was the *distributive* aspect of agriculture that first attracted the attention of the Indian Government. It was vitally interested in agriculture as from it is derived its Land Revenue which, in the beginning, was the most important item in public finance. For years, therefore, its energies were directed to evolving Land Revenue Settlements in the different provinces of India suitable to varying local conditions of land tenure. It looked little beyond its fiscal interest. It organized survey of its landed property, prepared a cadastral register of its tenants, defined the basis of assessment and set up the Revenue Department for the collection of its share in the produce of land. We shall deal with this subject in the Fourth Part of this book.

Incidentally to the ascertainment and collection of its share Government came to regulate the shares of other parties interested in the land, *viz.*, the landlords and their tenants. This has given rise to a mass of legislation and administrative practice about which also more will be said in the Fourth Part.

In this Chapter we are primarily concerned with the *productive* aspect of Indian agriculture. What has the State done to increase the productivity of land? We shall say more about its Irrigation Policy in the Ninth Chapter. Here we shall deal with the agricultural policy so far as it is directed to the technical *improvements* in production. The history of Government policy in this respect has been lucidly set forth by Sir James MacKenna in his *Agriculture in India* (1916). It was at the instance of the Manchester Cotton Supply Association that in 1869 Lord Mayo's Government was urged to establish a Department of Agriculture in each province, primarily for the improvement of cotton. However, only an additional secretary was added to the Government of India and placed in charge of revenue, agriculture and commerce. In 1879 the new secretariat was absorbed in the Home Department of the Indian Government, and attention was mostly devoted to the collection of statistics. It was on the recommendation of the Famine Commission of 1880 that provincial Departments of Agriculture were created but no real progress was made for a long time for there was no trained staff of agricultural experts available in the country. As Sir James says: * "The vast problems of Indian agriculture were being attacked by a mere handful of isolated workers with

* *Agriculture in India*: p. 16.

no trained staff and no organization to give effect to their recommendations. The general impression one gets from the records of these early efforts is that men were groping in the dark. The problems were so numerous and overwhelming that they did not know where to begin". In this connection a reference should be made to the visit of Dr. J. A. Voelecker to India in 1889 and his "*Report on the Improvement of Indian Agriculture*" was the first scientific investigation into the subject. But it led to no practical results.

The disastrous famines at the end of the last century directed the attention of Lord Curzon to the problem of Indian agriculture. In 1904 the Agricultural Research Institute was established at Pusa which, since then, has become the chief source of inspiration to agricultural reform in all provinces. Agricultural Colleges have been started at Poona, Cawnpore, Nagpur, Lyallpur and Coimbatore. The provincial Governments are now spending more liberally upon the agricultural Departments. In most provinces there are official and non-official agencies and Departments like the Co-operative Departments to carry the results of research to the cultivators. And yet the rate of progress is slow. We shall consider in the next chapter what the Agricultural Departments have achieved hitherto; what have been the main obstacles in the way of a more rapid rate of progress, and how it is proposed to overcome them. These last two questions are best taken up in the Ninth Chapter.

CHAPTER VIII

DEMANDS ON INDIAN AGRICULTURE

(1) INTRODUCTORY—We saw in the last chapter the principles on which the right agricultural policy should be based. So far as that policy raises questions in *distribution*, e.g., the Land Revenue Policy, Tenancy Laws, Agricultural Wages, they will be dealt with in the last Part of this book. So far as that policy raises questions of *production*, they will be taken up in this and the following chapters. Agriculture in India has to meet a two-fold demand: a demand of the Home market and a demand of the Foreign markets. We shall, therefore, roughly examine the broad varieties of the Indian soils, the area under cultivation, the main crops and what the Agricultural Department has done by way of improvement in the past.

(2) VARIETIES OF SOILS*—Some account has already been given, in the Second Chapter, of the physical conditions and meteorology of the country. In addition to physical conditions and rainfall agriculture depends upon the nature of the soil. Broadly speaking there exist in India three varieties of soils resulting from three kinds of geological formations.

Agriculturally the most important soils are the *alluvial soils*. They occupy the greater portion of Sind, Gujerat, Rajputana, the Punjab, the United Provinces, Bengal, and the Godavari, Krishna and Tanjore districts of the Madras Presidency. They also occupy

* Cf. *Imp. Gaz.* Vol. III. Ch. I. : p. 8-11.

extensive tracts in Assam and Burma. An alluvial strip of varying width extends along the Eastern and Western Coasts of the Peninsula, widening at the deltas of the great rivers, and reaching irregularly into the valleys of the Eastern and Western Ghats. Rich alluvial soils fringe the courses of the great rivers of Peninsular India.

The *Deccan Trap formation* (and soils resulting therefrom) extend over an area of 200,000 sq. miles and cover the greater portion of the Bombay Presidency, Berar, the Western third of Central Provinces, and the Western half of Hyderabad State. The soils of this formation are extremely variable in kind. One particular variety is the well-known black cotton soil to be found in many parts of the trap formation. This black cotton soil is to be also found outside this formation, *e. g.*, in the Surat and Broach districts of the Bombay Presidency, and in the Beilary, Cudappa and Curnool districts of the Madras Presidency. In all these districts it is alluvial in formation.

Soils of the *crystalline* tract occur in the remaining parts of India, *i. e.*, the whole of the Madras Presidency, Mysore, the south-east portion of Bombay Presidency, the eastern half of Hyderabad and two-thirds of the Central Provinces, the Orissa and Chota Nagpur Divisions, the Santhal Parganas and Birbhum districts, parts of Mirzapur, Zansi and Hamirpur districts, the Bagalkhand states of Central India and a part of Eastern Rajputana. The soils of this formation also are various.

(3) TECHNICAL IMPROVEMENTS IN AGRICULTURE—
From the soils we may turn to the way in which they are used for crop production. We have seen before how the Provincial Departments of Agriculture were

created and Research Institutes and Colleges established for the improvement of agriculture. The problems with which they have to deal are many. They have been lucidly set forth in Mr. A. Howard's *Crop-Production in India*. He rightly says in his preface: "Agriculture is and for many years to come must remain India's greatest industry and the foundation of the State. In comparison with the value of the annual produce of the soil and the trade in raw materials, the remaining industries of the country are, with few exceptions, relatively unimportant". The problems relate themselves to the improvement of the *soils*, and to the improvement of the *crops*. The subject is a technical one and for a detailed exposition the reader must be referred to the book just mentioned which also contains further references for reading. Among the problems of the soil are (a) the proper regulation of the surface drainage with a view to conserving the fertility of the soil; (b) the proper *cultivation* of the soil. The object of cultivation is to break up the soil into a porous mass consisting of fine particles of earth. Air is able to circulate freely in the soil and thus to promote with the help of moisture the vital functions connected with the germination and growth of plant life. This subject of soil-aeration is one of great importance. As soon as the water accumulates in a field it stops the free circulation of the air *through* the soil and the crops suffer. The resulting loss to the cultivators must run into crores of rupees. "The remedy is simple and within the means of every cultivator. The surface of each field should be graded so that absorption is uniform. The surplus water should be got rid of by surface drains, and not allowed to run over other land

on its way to the drainage lines.”* Another important object of ventilating the soil by thorough cultivation is to enable the roots of the crop to ‘fix’ the nitrogen in the air and to utilize it for the growth of the plant. In view of the importance of soil aeration the necessity of designing efficient implements for cultivating the soil becomes obvious. The implements of the ryot have remained unchanged for centuries. The Agricultural Department has done a great deal to invent and popularize iron implements suitable to Indian soils and climate.

(c) The third problem of the soil is to replenish it with nitrogenous matter of which it is deprived at each successive cropping. Mr. Howard estimates that in India a rough equilibrium has been established between the gains and losses of nitrogen. “For the last 300 years the producing power of the soil has not appreciably changed. If, therefore, it is desired to increase the yield per acre, either the losses of nitrogen must be reduced or the amount added to the soil must be increased or rendered more productive.”† The practice of using cow-dung as fuel and the large exports of food grains and oil-seeds represent a *net* loss of nitrogen to the soils in India. The object of manuring the field is to restore to it the nitrogenous compounds, as of cultivating it is to secure aeration. The manures are natural or artificial. Cowdung, farm refuse, other organic residues, oil-cakes, green-manuring are examples of the first kind. There are also artificial ways of manufacturing nitrogenous manures, *e. g.*, sulphate of ammonia from the coal fields and

* *Crop-Production in India*: p. 22.

† *Crop-Production in India*, p. 35.

secondly the fixation of atmospheric nitrogen by electric process. Experiments must be made before we can definitely say which manures are suitable to Indian conditions, and if the use of artificial fertilizers is found to be profitable, these fertilizers will have to be produced on a large scale so that the price may be within the means of the Indian ryot, and also they will have to be of the right quality.

(d) What Mr. Howard calls the 'Alkali problem' results, generally, from excessive irrigation of the fields by canal water. The soluble salts in the soil are brought to the surface and form a white crust rendering the land absolutely useless for agricultural purposes. This evil of salt-efflorescence is a serious handicap on the extension of canal irrigation. It has made its appearance in the Punjab, in Oudh and in the Bombay Deccan where canal irrigation has made great progress. The alkali salts appear to interfere with the supply of air to the crops. The remedy seems to lie in an effective *drainage* of the fields, the water that is drained out carrying away with it the salts in solution.

After the soil has been well prepared by levelling, grading and cultivation and properly moistened it is ready for bearing the crop. "When we examine the agricultural products of India, it is at once evident that crops are of far greater importance than animals. This state of affairs is likely to continue, as the pressure of population will probably increase rather than diminish. The people are largely vegetarian, while seeds and fibres are the most important articles of export. The Indian cultivator is a grower of crops, his live stock are mere aids in cultivation and in the feeding of his family. The country does not export

meat, wool or dairy products.” *

This requires the greatest care in the selection of the seed and rearing of the plant. Bad or inferior seeds not only mean low productivity but lack of uniformity in the produce. For modern large-scale production the raw material has got to be of uniform quality that can be easily described and ascertained. Then only can it be fit for the international market.

A great deal of attention has been paid to the improvement of varieties of crops. As Mr. Howard points out,† there are three methods of doing so: acclimatization of exotic varieties, selection from existing indigenous varieties and creation of new ones by hybridization. Efforts made to grow American and Egyptian varieties of cotton and tobacco in India have not proved successful. On the other hand the methods of selection and hybridization have proved highly successful. As examples of successful selection we may mention the *Roseum* variety of cotton now extensively grown in the Central Provinces, and the varieties of wheat known as Pusa 4 and 12 and Punjab II. Hybridization consists in “the crossing of unit species for the purpose of bringing about new combinations of useful characters in the offspring.”‡

Improved varieties not only give *greater* quantity and *uniform* quality, but they make *intensive* cultivation possible. “It is this combination of a more efficient plant and improved methods of agriculture which holds out such great hope for the future.”§

When the right varieties have been arrived at by any of the processes mentioned above, efforts have to be made to popularize them by the distribution of

* *Crop. Production in India* : p. 61.

† p. 62.

‡ *Crop-Production* : p. 64.

§ p. 67.

seeds. The Indian ryot is too poor to adopt these improvements unless their-profitableness is brought home to him. The Agricultural Departments have done a great deal in distributing pure seeds. As Sir James Mackenna happily puts it "the seed is the rock on which the house of Agriculture must be built"*. A glance at the *Report on Agricultural Operations in India* (1924-25) shows the results achieved in this direction by the Departments. In *Bengal* improved varieties of paddy that give a heavy yield, and of jute that give finer quality and greater quantity of fibre have made great progress. In the *United Provinces*, varieties of wheat (Pusa 4 and 12) that are high-yielding and rust-resisting, of cotton that give better lint and higher ginning percentage and of sugar-cane that give more out-turn of cane per acre and 50 per cent of more *gur* than the local canes have made considerable progress. In the *Punjab* the greatest progress has been made by improved varieties of wheat (Punjab 11 and 17, and Pusa 4 and 12) and of long-stapled cotton. In *Bombay, Madras and the Central Provinces* wheat, cotton, ground-nut and sugar-cane have been improved. It has been calculated that the acreage under the improved seeds in the whole country for 1924-25 was as follows:†

Acres		If Rs. 10 per acre be taken as the <i>additional</i> profit made from the adoption of the improved varieties, it is estimated that the annual value of the agricultural crops has been increased by seven crores of rupees.
Cotton	3,011,447	
Wheat	2,282,120	
Rice	569,908	
Jute	299,520	
Sugar-cane	75,334	
Other crops	521,970	
Total	6,760,299	

* *Agriculture in India* : p. 28.

† Cf. *Appendix I to the Report on Agricultural Operations* (1924-25).

An important problem connected with Indian agriculture is that of *fodder supply*. As the work of cultivation is mostly done by cattle, agriculture will not improve unless the cattle improves. On account of the increasing pressure of population on land the area available for grazing purposes is contracting, and this shortage of grazing and fodder is responsible for the deterioration of cattle and the neglect of tillage. In India there is little prospect of improving pastures—the rainfall and soil being both unsuitable—and special efforts have to be made to increase fodder supply. Experiments have shown that excellent fodder crops, *e. g.*, lucerne, maize and millets can be grown by intensive cultivation. Methods have also to be devised for *storing* the fodder. Efforts are being made in this direction also.

(4) THE MAIN INDIAN CROPS—We have now rapidly reviewed the main lines of technical improvements of the soil as well as the crops. It now remains to describe briefly the distribution of the main crops of India.

The conditions under which and the purpose for which the crops are raised have been well described by Mr. Howard thus: * “India is a land of small-holders devoted to the raising of crops. These are of two kinds. First in area and importance are the food crops—the cereals and pulses which feed the population. The second group comprises the money crops, by which the cultivator pays the land revenue and purchases the necessaries of life. The surplus produce, which remains after the needs of the country are satisfied, is exported.”

* *Crop-Production in India* : p. 52.

Food-grains—Out of a total cultivated area of approximately 227 million acres, these occupy 200 million acres. Of these *Rice* is by far the most important. It occupies nearly 80 million acres and produces more than 31 million tons of cleaned rice. Next to China India is the greatest producer of rice in the world and supplies rice to three continents. The exported rice (between 70 to 75 p. c.) comes from Burma. The yield per acre is about $8\frac{1}{2}$ cwts. and compares unfavourably with that in Japan where it is between 21 to 22 cwts. per acre. Next to rice is *Wheat*. The area under it is 27 million acres producing 8 million tons. India ranks fifth in the wheat-producing countries of the world, the first four being the U. S. A., Russia, Canada and Argentine. The chief recipient of Indian wheat is the United Kingdom. At one time Indian wheat was not regarded with favour in the English market because of admixture with dirt and low milling and baking qualities. But the new varieties of Pusa 4 and 12 were found to satisfy the tests of the English market and they are also appreciated in the local market and the area under them is extending. We need not say anything about the other food-grains such as the millets, maize, barley, gram, etc.

The area under other food-crops (including fruits, vegetables, spices, etc.) is 7.8 million acres only.

Next comes *sugar-cane* covering an area of nearly $2\frac{3}{4}$ million acres. 75 p. c. of this area is in the Indo-Gangetic plain. "The average yield of sugar in India during 1914-19 was about one ton per acre compared with two tons in Cuba, four tons in Java and $4\frac{1}{2}$ tons in Hawaii."* It is on account of this backwardness in

* *Crop-Production* : p. 123.

the methods of sugar-cane cultivation and sugar manufacture and not on account of the smallness of area that India has been importing cane sugar from Java and Mauritius and beet-sugar from the Continent for the last many years. A Committee was recently appointed (The Indian Sugar Committee 1920) and its Report contains valuable information about the conditions under which sugar is made in Java and other countries and suggestions as to improvements in India. The latter consist in the selection of better varieties, intensive cultivation and large-scale manufacture of sugar. "With regard to sugar a serious economic drain is in progress, and no efforts should be spared in exploring the best means of making India self-supporting in this respect."*

Next Tea—The E. I. Co. took interest in this plant from very early days and made many attempts to introduce it from China, but without success. The experimental stage was over by 1860 and tea-plantations began in right earnest in Assam and in South India. At present more than 700,000 acres are devoted to this crop, producing 375 million lbs. of tea. The average yield per acre is not more than 800 lbs. per acre under the best conditions and compares unfavourably with 1000 lbs. per acre in Java and Ceylon. The tea-gardens are mostly European concerns, though Indian enterprise is making slow progress in the field. Most of the tea is exported.

The group of *oil-seeds* crops is a very important one. Together they cover 15 million acres and produce 5 million tons of seeds. The principal seeds are: linseed, rape, mustard, sesamum and ground-nut. The

* *Crop-Production* : p. 123.

export-trade in oil seeds has interesting points. First is the gradual growth of this trade. Fifty years ago the trade in linseed and ground-nut was negligible. At present it represents 6 to 7 p. c. of the total export trade of the country. Secondly, there is the tendency of exporting the seeds, as well as the oil and the cake. The export of the seeds and the cake means, as stated before, a loss of nitrogen to the soil. Can the resulting impoverishment of land prevented by prohibiting the exports of the seeds? An export duty or complete prohibition would adversely affect the cultivators. It has also to be remembered that there are competing sources of supply, *e.g.*, the Argentine produces linseed, and Roumania rape seed. Supplies of other seeds are available from Africa and China. The real solution lies in the development of Indian industries so that they will create an *internal* market for the oil. Indian agriculture also must become *intensive* to create a demand for the oil-seed cake for manuring. Only then would the extraction of oil *in* India be a profitable industry and the evil of soil impoverishment be stopped. The third interesting point about the oil seeds is the extension of ground-nut cultivation. In 1880 this area was about 112,000 acres.* In 1924-25 it was 2,754,000. As Mr. Howard says, "the extension of ground-nut cultivation in India is one of the notable achievements of the Agricultural Department."†

We then turn to the *Fibre crops* which between them occupy 21 million acres of land. Here *cotton* is easily the crop of first importance. It covers 17½ million acres and grows in the drier regions of the country. The most important tracts are

* *Handbook of Commercial Information*: p. 163.

† *Crop-Production*: p. 153.

the black-cotton soil areas in the middle of Peninsular India—Berar, Central Provinces, C. I. States, Bombay Deccan and Hyderabad State. Cotton is an irrigated crop in Sind and the Punjab. The average yield is very low, about 82 lbs. of lint per acre which is $\frac{1}{3}$ of the yield in the U. S. A. The production of cotton in India was enquired into by the Indian Cotton Committee in 1919. There has been established in the country the Central Cotton Committee and efforts are being made to improve the varieties, to grow long-stapled cotton (which is suitable for the Lancashire mills) and to extend the area under cotton by undertaking irrigation works in the Punjab and Sind. Reference has already been made to the export trade in cotton.

Unlike the cotton crop *Jute* is confined to a narrow strip of country on both sides of the Bramhaputra. The six districts of Mymensingh, Dacca, Tippera, Rangpur, Faridpur and Pabna produce between them about $\frac{1}{2}$ of the total. The area under jute is 2.7 million acres and produces 8 million bales of 400 lbs. each. Unlike cotton also, India has a monopoly of this crop, attempts to grow it in other countries or to find substitutes for it having failed. Again, the tendency is for more *raw* cotton to be exported whereas in the case of jute increasing *manufactures* are exported. Further, the cotton-industry is spread over the whole country and is mainly in Indian hands; the jute-industry is confined to the suburbs of Calcutta and is a close European concern. A remarkable feature of jute has been the extension of area under cultivation. As Mr. Howard says, "One of the most striking developments in Indian agriculture during the last 100 years is the spread of jute cultivation in

Bengal.”*

We need not say much about *Indigo* and *Opium*—important crops at one time, but now fast vanishing, the first because of competition of artificial dyes, and the second because of the policy of the Indian Government to prohibit the exports of Opium to the Far East and restrict its cultivation for internal consumption. *Tobacco* is an important crop, covering more than one million acres. But the varieties have to be improved and progress made in the local manufacture of cigarettes, etc. The area under *Fodder crops* is more than 8 million acres. This is small compared to the needs of feeding and breeding good cattle for Indian agriculture. Reference has been made to this subject on a former page.

(5) TWOFOLD DEMAND IN INDIAN AGRICULTURE—The foregoing statistics and information give some idea of what agriculture in India is able to produce to meet a twofold demand made upon it: (a) it has to feed and clothe the Indian population and find a substantial proportion of provincial and local revenues. To be exact, it contributed by way of Land Revenue, mostly to the Provincial Governments, Rs. 35·84 crores in 1924-25 and Rs. 4·60 crores by way of provincial rates to the Local Boards in all the provinces in the same period;† (b) and secondly, it has to furnish food grains and raw materials for export.

Now the annual area sown with crops in British India is 225 million acres to meet the varied requirements of a population of 247 millions (in British India).

* *Crop-production* : p. 135.

† *Statistical Abstract (Fourth Issue)* : pp. 165 and 260.

This is *less* than one acre per head of the population. If we also include area which is sown *more* than once, the total is approximately 260 million acres, thus giving a little *more* than one acre per head of the population. Sir T. W. Holderness calculates that the produce of $\frac{1}{3}$ of an acre per head is required for exports to pay for the imports and other international debts. This leaves only $\frac{2}{3}$ of an acre to meet the domestic requirements of the population in British India. "India, therefore, feeds and to some extent clothes its population from what $\frac{2}{3}$ of an acre per head can produce. There is probably no country in the world where the land is required to do so much."*

(6) EXTENSION OF CULTIVATION AND EXPORTS—Two interesting questions now arise:—How has India managed to meet this demand in the past? What are the prospects of her ability to meet it in future? We might reply in a general way that *in the past* the demand was met by (a) an extension of cultivation; (b) the substitution of commercial or non-food crops for food crops; (c) to a small extent, by improving the varieties (giving greater quantity and better quality) of certain crops as shown in the last section and (d) by greater exports of the non-food crops. *In years to come* however, the demand can only be met by an *improvement* of agriculture.

There cannot be the least doubt that the area under cultivation has greatly increased in the past as a result of the rise in the prices of agricultural produce due to the creation of internal and external markets which, as we saw before, was a characteristic feature of the economic transition. We thus read in

* Sir T. W. Holderness : *Peoples and Problems of India* : p. 140.

an official memorandum* : "Between 1856-1910 the cultivated area has more than doubled in thinly peopled tracts like Burma and Assam; it has increased by 30 to 60 p. c. in Central Provinces, Berar and parts of Bombay; and in the thickly populated province of Oudh it has increased by 30 p. c. In the Punjab and Sind great tracts of once barren land have been brought under tillage by means of State canals."

With regard to extension of cultivation we must bear in mind the following peculiarities and limitations. The cultivated area is a *fluctuating* quantity from year to year, and from period to period. The *annual* fluctuation is obviously due to the amount and distribution of rainfall, and we need not say much about it. The *periodic* fluctuations are due to alternate states of agricultural prosperity and depression. Reviewing broadly the progress of Indian agriculture from this point of view we might say that the first fifty years of the last century were a period of depression and considerable shrinkage in the area under tillage. With the establishment of a stable administration and the construction of railways a period of prosperity set in which lasted from, say, 1858 to 1872 with a corresponding increase in area. The period 1872-78 was marked by disastrous famines. It also marks the beginning of a *fall* in prices in the European Countries with resulting depression of trade and industry. Thus in this period the area contracted. There was a recovery in the period 1878-1898 at the end of which occurred a series of the worst famines of the last century coupled with the ravages of plague. From 1904 again agriculture began to revive. Government

* *Memorandum on the Results of Indian Administration during the past fifty years.* : Calcutta, 1911 : pp. 23-24.

adopted an active Irrigation policy. The Departments of Agriculture were energized. This was a period of *rising* prices and of great industrial activity in Western countries. Then came the Great War with a new demand for the products of Indian agriculture. Years 1907 and 1915-18 were years of famine, and since 1921 we have *falling* prices and agricultural depression.

In spite of these ups and downs, there has been a steady extension of cultivation—of rice and ground nut in Burma, of tea in Assam, of jute in Bengal, of wheat in the Punjab and Sind, of cotton in Bombay, Berar, the Punjab, parts of Madras. But what is the scope for *further* extension? We find from figures that the area returned as “available for cultivation” is even now 150 million acres. Apparently this promises unlimited expansion. But when we examine how this ‘culturable waste’ is distributed among the provinces, we find that in most provinces the limit of cultivation has not only been reached but overstepped long since. We may for this purpose roughly divide Indian provinces into two classes, *i. e.* (a) Those where the average density of the population is *less* than the mean density for India. These are the N. W. Fr. Province, Bombay, Assam, Central Provinces and Berar, and Burma; and (b) those provinces where this density is *greater* than the mean density, *viz.* Bengal, United Provinces, Bihar and Orissa, and the Punjab. We might imagine that there would be considerable scope for expansion in provinces in the former class. But when we further analyse the figures and find out what percentage of the cultivable area is actually under the plough, we find that this is high, showing that in these provinces also the scope is limited. Some colonization is going

on in Assam; in Burma there is not much room for *Indian* immigration for permanent settlement on land, for the cry of "Burma for the Burmese" is getting louder every day; there is some scope for expansion in the Central Provinces. In the thickly-populated provinces, to which we may turn next, the fact of emigration shows that the population is already pressing on land in the United Provinces, Orissa, and Madras. In these provinces as much as 80 to 90 p.c. of the culturable land is actually under the plough. A detailed study of these provinces district by district shows that where the population is *apparently* less dense, or where there is *apparently* more culturable waste available, the operation of some counteracting cause or causes might always be suspected, *e.g.* malarial fevers in certain districts of Bengal and Bihar, barrenness of soil in certain districts of the United Provinces and Madras, aridity as in the Punjab and Sind, precarious rainfall as in Madras and the Bombay Deccan and the Central Provinces. Progress of irrigation, improvements in communications, better sanitation, drainage, reclamation, effective control of tropical fevers—might lead to further extension of cultivation—but this is bound to be a slow process. We must, therefore, find the solution of our agricultural problem in a more *intensive* cultivation of land already cultivated than in its further *extension*.

Again, though extension has taken place in the past and *some* might take place in years to come, we must bear in mind the following limitations:—(a) Part or whole of the extension would be absorbed by the growth of the population which is taking place *pari passu*. It is difficult to say what has been the relation between these two factors in the past. This question

was examined by the Prices Enquiry Committee of 1912-13. Its conclusion may be expressed thus :

	Average 1890-91 to 1894-95	Average 1895-96 to 1899-00	Average 1900-01 to 1904-05	Average 1905-06 to 1909-10	1910-11	1911-12
Population ...	100	101·6	103·7	105·7	107·8	108·4
Area under cultivation...	100	·98	103	105	108	106

According to this Committee, therefore, the area did *not* keep pace with the population. But this conclusion was not accepted by the Government of India who impugned the data on which it was based, and gave certain statistics to show that the area *had* kept pace with the population, though it was ahead of the population by a narrow margin. It is clear, at any rate, that the race between extension of cultivation and growing population is like that between the tortoise and the hare, and unlike the tortoise in the fable, our tortoise of cultivation must be soon outdistanced by the hare of population.* (b) Secondly, every extension of cultivation means descent to inferior lands, and therefore, greater cost. A great deal of the land returned as 'culturable' is really too poor to be broken up and brought under the plough. (c) Every extension must mean an encroachment upon the grazing land of the village. In view of the vital importance of cattle to the Indian ryot for the supply of milk as much as for work on the fields, a serious reduction in the grazing land might have disastrous consequences on the quantity and quality of cattle, and on agriculture

* Cf. Wattal's *The Population Problem in India* : p. 42.

generally. It is indeed the opinion of competent authorities that already the situation has become acute in the thickly-populated provinces where every available acre has been turned into arable land. (d) Again it is not *desirable* that *all* culturable land should be cultivated. Some is too barren to be cultivated. Some land is always required for uses subsidiary to agriculture. Some land provides various articles, *e.g.*, bamboos, leaves, etc. required by the rural population. (e) Not the least calamitous result of extension of cultivation (effected by clearing of the forests) would be a shortage in the supply of fuel. Insufficiency of fuel compels the peasant to use cowdung for that purpose, and thus the source of a valuable manure is lost.

We have now considered one of the ways, *viz.*, extension of cultivation by which India met the heavy demand made upon her agricultural resources. The other three ways previously referred to are: the substitution of 'commercial' crops for food-grains, the improvements of crops (about which something has already been said) and thirdly, increasing exports of both. We shall for the present consider only the process of substitution and increasing exports of the commercial crops. As in the case of extension, we shall take a normal period, say, 1892-97 (which is free from famines) as our basic period and compare the growth in the cultivation and exports of the food and non-food crops. Figures of this kind have not been compiled by any authoritative Committee, but Profs. Wadia and Joshi have made an attempt in that direction and the two following tables have been taken from their book.*

* *Cf. Wealth of India* : pages 214 and 216.

* A few statistics bearing on the extension of cultivation of food-grains and non-food crops in British India between 1892-1916.

Year	Area under food crops		Area under non-food crops.		Area under cotton and jute		Population increase in the same period	
	Million acres	% Increase	Million acres	% Increase	Million acres	% Increase	Million	% Increase
1892-93	187	100	30	100	11	100		
1900-1	191	102	33	110	12	109	231	100
1910-11	214	114	41	137	17	154	244	105.5
1919-20	210	107	43	143	18	164	247	106.8
1924-25	210	107	46	155	20	181		

† Table showing the *percentage* increase in the production & export of important crops in the average period shown.

Crops		1892-97	1901-06	1911-16
Rice	{ Production	100	105	142
	{ Export	100	142	139
Wheat	{ Production	100	152	164
	{ Export	100	140	147
Wheat flour	{ Production	—	—	—
	{ Export	100	136	213
Cotton-raw	{ Production	100	176	220
	{ Export	100	143	180
Jute-raw	{ Production	100	129	154
	{ Export	100	127	127
Seeds	{ Production	100	—	—
	{ Export	100	111	126

* Wadia & Joshi—*Wealth of India* : p. 214.

† Profs. Wadia & Joshi: page 216.

We see from the first table showing extension of cultivation, that whereas the food crops increased only by 7 p. c. the non-food-crops (excluding cotton & jute) increased by as much as 55 p.c. and the fibre-crops increased by 81 p.c. As against the increase in food crops we must put on approximately equal increase in the Indian population (the population in Br. India). From the second table showing the increase in the exports of certain important crops, we see that the increased area is nearly absorbed by the increased exports. In the case of wheat we must take into account the export of wheat flour also, which has increased greatly. There is, no doubt, an appreciable margin between the cultivation and exports of cotton and jute. In the case of cotton, the margin is an index of increased consumption by the Indian mills, and in the case of jute, it is an indication of the tendency to export jute in a manufactured, instead of raw, condition.

From the very small increase in the area under food-grains it would almost appear that "We are consuming from year to year a definite minimum of our annual production of food stuffs, not a minimum that keeps us fit, but a minimum that just keeps us alive; and any further relative growth of exports as compared with production can only mean famine and starvation for some portion of the Indian population."* And from the close parallelism in the growth of cultivation and exports of commercial crops, it would seem that it is the *foreign* demand that determines what and how much of these crops will be grown in India.

* *Wealth of India*: p. 219.

(7) EXPORTS—A SURPLUS ?—With regard to the export of food-grains like wheat, rice, pulses it is said that India in years of normal rainfall produces a *surplus*. In times of famine when production is below normal, the exports contract and the surplus is made available for home consumption. A double advantage has been claimed for the export-trade in food-grains. During normal times it fetches high prices to the cultivator, and it is the best insurance against famine as it makes available food-grains which, in the absence of the export trade, would not have been grown at all. The export trade in non-food crops is justified on the ground that India has limited use for such crops as there are no industries (except the cotton and jute textile industries) to absorb them. The country *gains* by exchanging its raw materials (which it cannot *use*) for essential manufactures (which it cannot *produce*). Now it seems to me that our inability to consume the food-grains we produce is due to the lack of purchasing power on the part of large sections of our population. They are too poor to buy those food-grains. Our inability to utilize our agricultural (and also mineral) raw materials is due to our industrial backwardness. Food-grains are exported because our standard of *consumption* is inferior; raw materials are exported because our standard of *production* is low. An exportable *surplus* is a *relative* term. Surplus over *what*? If we exported what we have over and above the requirements of a *decent* and *human* standard of consumption for the *whole* population, none need complain. Similarly, if we exported such raw materials as were left over after meeting the demands of prosperous local industries, none need complain.

In both cases there is a *real* surplus. But the surplus becomes fictitious if food grains are exported when the population is underfed, and raw materials are exported when there are no national industries. A surplus that represents a starving of our bellies and a stopping of our bellows (industries) is a cause for anxiety.

Profs. Wadia and Joshi put the same argument in the following words: "A surplus implies an excess over a definite minimum which in the case of the individual will be measured by his standard of life, in the case of a country by its economic organization and stage of development. But as an individual may be underfed and a cut in wages may compel him reluctantly to subsist on starvation rates, while the employer may show a surplus for distribution, so a country may under alien rule be denied opportunities for industrial development and be in a position to show a surplus of raw materials available for export. But as sweated and low-paid labour may ultimately affect economic development and efficiency, and surplus for distribution as dividends may be the precursor of economic crises, so the surplus of raw materials which is the product of a policy of repression may be the precursor of economic ruin, involving within its sweep not only the country subjected to repression but the author of the repression policy itself." *

(8) NECESSITY OF AGRICULTURAL IMPROVEMENT—It is clear in any case that whether the exports represent a real surplus or a subtraction from what I may call the efficiency-minimum for

* Wadia and Joshi : *Wealth of India* : pp. 209-10. Also *Of Ch. XII*
Indian Fin. Com.

the population and industries of the country, this surplus has got to be a *large* surplus, and it can only be so by *improving* agriculture and, only inappreciably, by extending the area under cultivation. Improved Agriculture is the foundation of our prosperity. We depend upon it for our *employment*, *sustenance*, and *exports* which pay for our varied imports. Our entire external trade depends upon it. Our finances depend upon it. Our exchange-rates depend upon it.

We may conclude this chapter with the following words of H. E. the Viceroy (Lord Irwin) employed by him on 27th May 1926 in inaugurating the preliminary inquiries in connection with the Royal Commission on Indian Agriculture. "India now has a definite place in the markets of the world. Her position as a source of supply of cotton, jute, wheat, oil-seeds and other raw products is likely in future to be increasingly important to consumers in other parts of the world, and the expansion in the quantity and the improvement of the quality of Indian agricultural products is a matter of serious concern in the general economic structure of the world's supply of food and clothing. The development of India's agricultural potentialities has now become essential to the maintenance of her commercial position. It is vital to her financial position and to the economic welfare of her people. India has to bear in mind the possibility of organized competition from other quarters in certain lines of supply where she now meets a part of the world's demand and receives a substantial income in return. Fluctuations in the bulk of her supplies or inferiority in quality as compared with supplies from elsewhere

might at any moment cause her to lose a market with those disastrous repercussions on her commercial, financial and economic position which a contraction of exports must involve."

CHAPTER IX

DIFFICULTIES AND REQUIREMENTS OF AGRICULTURE IN INDIA

(1) INTRODUCTORY—We now proceed to consider the difficulties and requirements of Indian agriculture. In the last analysis what is wanted is capital and some agency—official or private—for undertaking organized efforts for making best use of the capital. Such efforts must be directed in three directions: (a) permanent improvement of land; (b) technical improvements in methods of cultivation; (c) emancipation of the peasants and their instruction in bringing about improvements under (a) and (b) and (c) in the marketing of the product.

(A) LAND IMPROVEMENTS

(2) RECLAMATION—Reference has already been made to the limited possibility of further extension of cultivation. And yet there is no doubt that there is ample room for the reclamation of waste lands. Efforts in this direction have to be necessarily on a large scale and on a scientific plan, and responsibility of initiating them,—and in many cases of bearing the financial burden also,—rests with the Government.

(3) IRRIGATION—Perhaps the most important way of making permanent improvements in land in a dry country like ours is to provide it with water. The necessity of artificially supplying water to the growing and maturing plants, *i.e.* of irrigation will be obvious when we recollect what has been already

said in the second chapter about the amount and distribution of rainfall. Rain is sharply confined to a part of the year. Its deficiency or unequal distribution makes agriculture impossible or unfruitful. Irrigation in one form or another, *e.g.* wells, tanks and canals has been practised by the people for centuries. In those areas where the annual rainfall is less than 50 inches, some irrigation is necessary. This area includes the whole of the Punjab and the N. W. Fr. Province, the United Provinces except the submontane districts, Sind, a large portion of Bihar, most of Madras, most of the Bombay Presidency except a strip along the coast, portions of the Central Provinces and a small tract of Burma. It is clear that in such a vast area certain tracts like the Deccan uplands must have very narrow possibilities of irrigation in any form. In others the form of irrigation would depend upon physical conditions of the tract, amount of rainfall, etc.; and the object of irrigation might be to make agriculture *possible* or to make it *profitable*.

CLASSIFICATION OF IRRIGATION WORKS—We may now proceed to classify the irrigation works. Though people were familiar with irrigation before the advent of the English and many old works—great and small—are still extant, the construction of gigantic works for this purpose is essentially an achievement of the British Rule. We may say that Government works are of two kinds: storage works and non-storage works. Some means for storing water for irrigation during the dry season is necessary and the simplest example is a tank. These are large or small in size and scattered over the whole country, being most numerous in the Madras

Presidency where they irrigate between $2\frac{1}{2}$ to 3 million acres. But most of these tanks are of pre-British origin and Government have not shown much care for this form of irrigation. The real storage works constructed under the British regime lie in the hilly tracts of great rainfall, *e.g.* the Western Ghats, from which water is led in canals to irrigate the thirsty fields on the plains.

Non-storage irrigation works are possible where there is a steady supply of water in the rivers all the year round. It is the Himalayan rivers that derive water in the hot season from the melting of the snow, and rivers in the Madras Presidency that get supplementary and copious rain from the retreating monsoon that fulfil these conditions and afford irrigation without any elaborate storage works. Canals which rely solely upon the natural flow of the rivers for their supplies are again of two types: perennial canals and inundation canals. Perennial canals are provided with some arrangement in the vicinity of their heads, usually in the form of a weir or barrage across the bed of the permanent stream, by means of which they are enabled to obtain their supplies irrespective of the level of the water in the river. Inundation canals, on the other hand, have no such weirs and their supplies fluctuate with the natural water level in the river. When this rises, the level in the canal rises, when it falls, the level in the canal falls. These canals, therefore, can not be depended upon and their only advantage was cheapness. The present policy is to construct barrages across such rivers so as to secure reliable irrigation, the most famous work of the kind being the Sukkar Barrage across the Indus that is now under

construction. Inundation canals are to be found in Sind and the Punjab in connection with the Indus and Sutlej rivers.

This classification is based upon the nature of the Irrigation structure. From the *financial* point of view irrigation works are either productive or protective. The earlier works, though their construction or repair was undertaken to mitigate famines, proved also highly remunerative. These works were the Western and Eastern Jumna Canals, the Upper Bari Doab Canal, and the Godaveri, Krishna and Cauvery Canals in South India. With the construction of the canals in the deltas of the peninsular rivers the name of Sir Arthur Cotton is intimately associated. Encouraged by the financial results of his earlier works he evolved plans of constructing canals on the Krishna, Tungabhadra and Mahanadi rivers. The canals were to serve the purposes of irrigation as well as navigation and the financial prospects of the projects were thought to be so attractive that the requisite capital was raised in England by private companies formed for the purpose. But on account of various causes all the works that were begun proved failures and in most cases the State purchased the works. By 1866 it became a recognized principle that the State must directly undertake the construction of such works which, it was anticipated, would prove still remunerative if the mistakes made by private enterprise were avoided and if the canals were confined to irrigation purposes alone. The requisite funds were to be borrowed by the State. Under this new policy five large canals were carried out—the Sirhind, the Lower Ganges, the Agra, the Lower Swat and the Mutha Canals. Later on borrowed capital was also used for

the construction of the Lower Chenab Canal and for colonizing large areas in the Punjab by means of canal irrigation. All these canals are *productive*, for in addition to paying the cost of repairs, maintenance and administration they pay a *net* interest (often more than 20 to 30 %) on the original capital outlay.

But the famines of 1877-78 showed that canals should be constructed in areas of precarious rainfall as a 'protection' against famines, and not only when they promise to be remunerative as before. Among other measures adopted at that time for famine protection was the institution of the Famine Relief Insurance Fund by setting aside annually a sum of 1½ crores of rupees. Half of the amount was reserved for the direct relief of distress when famines broke out and the other half (Rs. 75 lacs) was to be utilized for the construction of railways and canals by way of 'protecting' the country against famines. For years the grant was generally absorbed in the construction of railways and little attention was paid to irrigation until the recurrence of famines towards the end of the last century again directed the attention of Government to this question and led to the appointment of the Indian Irrigation Commission in 1901. Among important protective works carried out between 1880-1900, we may mention the Periyar Dam and Canal in the Madras Presidency and the Jamrao Canal in Sind.

The Indian Irrigation Commission stressed the *protective* aspect of irrigation. It laid down the financial principle on which such works should be undertaken. It also examined the works that were actually under construction and also the schemes of projected works in each province. The progress

irrigation has made during the last twenty years is mostly on the lines laid down by this Commission. Some idea of this progress can be gathered from the fact that when the Commission reported in 1903-4 only nine protective works were in operation or under construction and the outlay on them was two crores of rupees. In April 1921 fifty-two such works were in operation or under construction and the outlay was about 12 crores of Rupees.

It will be seen that funds for 'productive' works are generally borrowed and those for 'protective' works are got from current revenues. Productive and protective works together were classed as 'major' works and separate accounts are kept for each of them and they are administered by the Irrigation Department. All works not classed as major are 'minor' works consisting mostly of tanks and small canals and maintained by the P. W. Department and administered by the Revenue Department. This distinction is now falling into disuse.

Since the Reforms of 1919 Irrigation, like Agriculture, has become an entirely provincial subject.

The progress of irrigation in the various provinces can be seen from the table given in the statistical appendix.

(4) THE PROBLEMS OF IRRIGATION—We have now briefly described the main classes of irrigation works. For a detailed account of individual works reference is invited to the *Triennial Review of Irrigation in India* (1918-21) and subsequent annual Reports of the P. W. Department. From this descriptive aspect of irrigation let us turn to examine the theoretical principles of irrigation and the right irrigation policy. This policy consists in making

the utmost use of rainfall for the purposes of agriculture and includes more things than are generally imagined. Thus it includes (a) *afforestation*. Forests induce more rainfall and help conserve the same, and increase the flow of subsoil water. It next includes (b) *the regulation of surface drainage*. In India much of the rain-water is wasted as it is furiously carried through the *nallas* and ravines to the rivers and thence to the ocean. This leads to the erosion of the soil. As Mr. Howard says,* "The surplus water rapidly runs to waste, and often there is no time for it to soak into the soil. Constant erosion, with consequent loss of fertility, accompanies this waste of valuable water." Extensive tracts—once very fertile,—have been permanently damaged by the erosive action of water on the left bank of the Jumna, in Central and in Peninsular India. The remedy lies in damming up *nallas* and the construction of embankments with a view to regulating the surface flow of water and allowing a greater portion of it to be absorbed by the soil. (c) In places where no irrigation is possible a system of *dry farming* will be found a useful substitute for it. Its essence lies in conserving the moisture of the soil by a proper selection of the crop, and constant weeding and harrowing.

Having arranged for the absorption of more rain water by the soil in the three ways mentioned above, our next step is the artificial storing of rain or subsoil water to which the name 'irrigation' is generally applied. We have seen before how Government has hitherto concentrated its attention upon the construction of huge storage works and canals to the comparative neglect of tanks and wells. I have

* *Crop-Production in India* : p. 12.

set out the merits and demerits of these modes of irrigation in Chapter IV of my *Economics of Agricultural Progress*. It is true that in writing that chapter I had in my mind the special conditions of the Bombay Deccan, but the conclusions will be found to have wider application. We may summarise them as follows : The construction of vast storage works is always costly; there is a considerable leakage of water on its often long journey from the reservoir to the ultimate fields ; in many places this leads to the breeding of mosquitos and the spread of malaria; the fields also get saturated with water, especially when it is freely given, and if no effective and costly measures are adopted for the proper *drainage* of land, it suffers from the evil of salt-efflorescence; it centralizes and departmentalizes the whole system of irrigation, rendering helpless the agricultural community and exposing it to the tender mercies of the subordinates of the Department; in the construction of storage-works a conflict of interests is likely to arise between agricultural development and industrial development, storage-works constructed for generating electric power being not suitable for irrigation and *vice versa*; finally, the working expenses of canals are often great, as a great deal of work, which in the case of private or communal enterprize is done gratis, has to be paid for when managed departmentally. Government should, therefore, encourage well-irrigation by (a) organizing some agency for the *scientific* location of water, (b) making suitable advances of capital for the sinking of wells and (c) by demonstrating the cheapness of lifting up water by pumps and engines. Government should also encourage the construction of *pats* and *bandharas*. Formerly such works were

undertaken by the joint enterprize of villagers from a single or many villages. Streams and rivulets were dammed up by a *bandhara* and the impounded water was taken to the fields by means of channels or *pats*. But such works have fallen into disuse on account of an excessive revenue demand that was imposed upon them for the 'water advantage'. It is high time for Government to appreciate the useful part these small and joint works of irrigation play in the rural economy of the country, to encourage their construction and help their upkeep.

But the problem of irrigation does not cease with the construction of the appropriate irrigation work. The water that is thus made available must be utilized to the utmost degree. For this purpose the fields must be of the right size and shape, properly levelled and embanked, carefully tilled and manured. Then only would every drop of water tell. We must guard ourself against excessive irrigation. Too much of water is as injurious to the crops and to the soils as its deficiency; it is even more injurious.

(B) CONSOLIDATION OF HOLDINGS

(5) SUBDIVISION AND FRAGMENTATION—We have already seen how imperative it is that the utmost use be made of land at present under cultivation if the demands of local consumption and foreign exports are to be adequately met. A serious obstacle to such optimum utilization lies in the state of sub-division and fragmentation of the land. We must now inquire into the causes of the evil, the extent of its prevalence and the remedies for its removal.

But before we proceed to do that we must appreciate the fundamental conditions that have

determined the agricultural practices in our country. The uncertainty of rainfall in our tropical country has taught many a lesson to the Indian cultivator. Thus he has adapted his crops to the conditions of soil and rainfall. Rice is admirably adapted to regions of heavy rainfall. It supports a dense population. On the other hand, the drought-resisting and quick-maturing millets are adapted to the drier regions.

Again, the ryot has learnt the method of 'mixed' crops. This practice ensures safety, for though some crops may fail others are able to withstand drought or disease and thus support the ryot. The ryot has an eye, not so much on *maximum* production, as on *some* production.

Finally, the ryot appreciates the advantage of having his holdings scattered in different parts of the village. At first the practice of allowing each cultivator to possess land of different kinds and in different localities of the village was undoubtedly due to the deliberate attempt of the village communities to equalize the opportunities for all. The practice is also partly due to the system of rotation of crops. The scattered plots, though each may be uneconomic by itself, become useful when regarded as *parts* of the total holdings of the ryot. This distribution of plots is, in fact, the result of the 'subsistence culture' stage of agriculture. If the peasant had his *whole* holding in *one* place and if it was devoted to the raising of a *single* crop, the yield, under favourable circumstances, would be much greater than if the holding was fragmented and put under a variety of mixed crops. But if conditions were *not* favourable, then scattered holdings and mixed crops have an advantage for they ensure against a total failure of crops. Indeed unless

provision is made for ample and reliable irrigation, consolidation of holdings would prove a doubtful measure. Consolidation must also bring about, to be useful, a change in the habits of the cultivators. The cultivators must leave their huts in the village and go to live, each on his own consolidated farm. This means a revolution in rural life. As noted before, we are going from the 'subsistence stage' of agriculture to the 'commercial' stage of agriculture. In the West this transition was accompanied by the movement for consolidation. But in the West rainfall is more uniform, agriculture is more diversified and does not consist in the mere raising crops as in India (there, in the West, is pasture, vegetable growing and animal husbandry), and there is not concentration of the population on land, as in India at present. Thus, though with the commercialization of agriculture consolidation is bound to come in India, the process will be slow and will cause great hardships to the poorer people.

The main cause of subdivision and fragmentation is to be found in the concentration of the population upon agriculture as a result of the Economic Transition. Not that the evil did not exist before; but it was held in check by the smallness of the population, by a *lesser* proportion of it depending directly upon land, by the existence of handicrafts which supported a considerable portion of the rural population and by the strength of the joint family system. But, as shown before, after the advent of the British Rule, the rights in land came to be precisely defined and this encouraged the subdivision of land *pari passu* with the break-up of the joint family. With the decline of handicrafts people had no other means of subsistence

or occupation but land and hence a keen scramble for the possession of what strips of land one was entitled to.

It has been well pointed out by Mr. Keatinge that the process of subdivision presents two distinct features in India. The first is subdivision proper which makes the holdings smaller and smaller in size. The second is fragmentation by which individual holdings, whether large or small, tend to become broken up into a number of separate blocks, often situated at a considerable distance from each other. The subdivision is the result of the Hindu Law of Inheritance by which the landed property of a father is equally divisible among his sons. The practice of fragmentation has its origin in a desire to provide a mathematically accurate share of each holding to the heirs. Each heir gets an equal share of good and bad land alike in as many places where the holdings are situated.

The evils are found to prevail in most parts of India. Dr. Gilbert Slater has referred to them in connection with villages in South India. Prof. Jevons has found them in the United Provinces. Detailed investigations were made in the Baroda and Mysore States. Mr. Calvert carried out an elaborate enquiry as to their extent in the Punjab, and with regard to Bombay, Dr. Mann and Mr. Keatinge have made minute investigations.

Mr. Calvert thus summarises his findings with regard to the Punjab.*

(a) About 17·9 *p.c.* of the owners of cultivated land in the province possess *less* than one acre of such

* *Size and Distribution of Agricultural Holdings in the Punjab* : p. 3.

land ; but the area thus owned is only 1 p.c. of the whole. (b) About 40.4 p.c. of the cultivators own from one to less than five acres ; the land involved is about 11 p.c. of the whole. (c) About 26.2 p.c. possess from five to less than fifteen acres. This is about 26.6 p.c. of the land. (d) About 11.8 p.c. own from fifteen to less than fifty acres, and account for 35.6 p.c. of the land. (e) About 3.7 p.c. possess fifty or more acres and own, at a rough estimate, 25.7 p.c. of land. "Thus while the majority of the Punjab peasants own very small parcels of land, the greater portion of the cultivated land in the Province is held in holdings of over 15 acres."

Mr. Calvert has discovered that the holdings are *larger* in the drier portions, and *smaller* in areas of assured rainfall. Mr. Keatinge has found the same in the Bombay Presidency. As he says,* "The extent of subdivision and fragmentation of holdings in the Bombay Presidency differs considerably in the different tracts. It is greatest in the rice lands of the Konkan and Ghat strip of the Deccan, where the conditions of rice cultivation and the value of the rice crop tend towards the existence of small holdings, and where the pressure of the population on the area of rice land, and in particular on the fertile coast strip, accentuates the evils of excessive subdivision and fragmentation." Similarly the evils are found in an acute form in the garden and rice tracts of Gujerat. "Over large tracts the average size of the holding is only two or three acres, while fields measuring less than half an acre are found to be subdivided into more than twenty separately owned plots, many of them of

* *Agricultural Progress in Western India* : p. 195.

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less than one *guntha* ($\frac{1}{16}$ th of an acre) apiece.”*

The *progress* of subdivision can be seen from the study of a typical village. Thus with regard to *Pimpla Soudagar*, a village near Poona, Dr. Mann got the following information :

Year		Number of land holders	Average size of holding
1771-72	Excluding inam land	19	40 acres
1791-92		35	21 "
1811-12		48	15½ "
1840-41		54	14 "
1914-15		156	7 "
(including 40 inam holdings)			

Of the 156 holdings only 20 are held as joint property of several members of the family. Only 29 holders have more than 10 acres per head, and 127 less than 10 acres each. Nor are the plots of each holder to be found in one place. The 156 holders have

between them more than 720 plots, 428 out of which are less than one acre in size. Land which is thus fragmented ceases to support the holders of small plots and they then leave the village after selling or subletting their plots. Thus in this village, out of 156 holders 109 actually cultivated the land. Thus the area *cultivated* per holder tends to be greater than the area actually *held*. But as the area thus acquired is in scattered patches, the evil of fragmentation is not abated. As Dr. Mann puts it :† “While the area *cultivated* per man is greater than the amount *held*

* Mr. Keatinge's *Progress* : p. 248.

† Dr. Mann : *Land and Labour in a Deccan Village*, No. I : p. 53.

per man, the number of fragments *per cultivator* is greater than the number of fragments *per holder*."

I cannot give more instances for want of space. They will be found in Dr. Slater's book or Mr. Keatinge's *Agricultural Progress in Western India*, Appendix I.

We may now summarise the evils resulting from subdivision and fragmentation as follows: (a) A great deal of time is wasted in cultivating small scattered patches. Some become so small that they go out of cultivation altogether. (b) No permanent improvements in the form of embankments, fencing, wells are possible, and even the existing ones soon fall into disrepair. (c) Nor can improved methods of cultivation, *e.g.* by iron ploughs be adopted on them. (d) The entanglements of small plots give rise to feuds and litigation, and engender disharmony in the village. (e) The cultivator is not able to go and live upon his farm even if he is anxious to do so, because his land is in ten different places. (f) Finally, outsiders with capital cannot easily get land (in one plot) in a village and all improvement in agriculture is thus stopped.

(6) WHAT IS THE RIGHT SIZE OF THE HOLDING?—It is ~~thus~~ clear that unless we make our holdings of the *right* size, not much progress is possible. But what is the *right* size? No short answer is possible. Some light will be thrown upon this subject if we briefly glance at the experience of other countries. In *new* countries, *e.g.* the United States, Australia, Canada, large farms (of 150 acres and above) are the rule. This is so because land is abundant and cheap, labour is scarce, and the cultivation is *extensive*. With the growth of population, the size of the farm, even in these countries, is progressively diminishing. In

England also the farms are large (between 200 to 300 acres) but cultivation is *intensive*. But the development of agriculture in England has been exceptional. In the first place, there are the laws of primogeniture and the practice of 'entailing' land by which property in land is confined to a handful of persons in England. Secondly, the growth of industries brought about a radical change in the methods of agriculture. Agriculture became 'capitalistic.' As Mr. Curtler points out* in his *History of English Agriculture* the 18th century introduced several interesting features in English agriculture. It first saw the application of capital in large quantities to farming. It also strengthened the tendency to consolidate small holdings into large farms. Owing to mechanical inventions and the consequent growth of the factory system, the great manufacturing towns arose, whence came a great demand for food, and to supply this demand farms, instead of being small self-sufficing holdings just growing enough for the farmer and his family and servants, grew larger, and became *manufactories* of corn and meat. Hence also arose the peculiar system of land holding in England: there is the owner of vast estates; these are held by the tenant-farmers who pay competitive (or customary) *rents* to the landlord; and there are the landless labourers employed as wage-earners by the farmers.

The present size of English farms is not liked by some agricultural reformers and we have already seen how Sir A. D. Hall proposes to create farms of anything from 2000 to 3000 acres, to be organized and managed as business enterprises. He sums up the

* P. 162.

advantage of such large-scale farming as follows : (a) economy in management ; (b) economy in labour by the use of motor ploughs, etc. ; (c) economy in buying and selling wholesale, in avoiding waste, in preparing for market by methods that are only remunerative on a large scale ; and (d) economy in the use of land by doing away with the numerous hedges and banks that divide small fields.

But this development of *intensive large-scale* (capitalistic) farming in England is exceptional. In all other European countries the pressure of population and delay in the growth of capitalistic industries led to the minute subdivision of land. When those countries, therefore, entered upon the policy of improving their natural resources one of the first and most difficult problem they had to tackle was that of consolidation of holdings. Thus in *Ireland* agriculture was in a state of utter depression in the second half of the last century. The Irish tenantry was rack-rented, impoverished and in a desperate condition. The legislation of Mr. Gladstone which conferred in 1881 the three F's—Fair Rents, Fixity of Tenures and Free Sales—upon the Irish tenants did not go to the root of the evil. It became evident that no legislation would permanently solve the problem of Irish poverty which did not aim at converting the Irish *tenants* into *proprietors*. This reform was achieved at a total cost of nearly 200 million £s of public money, by purchasing land from the landlords and making them over to the Irish peasants. A special Land Commission was created for the purchase and re-allotment of land. It was in this connection that the discovery was made that the success of the measure depended to a large extent upon fixing the *right* size of the holding.

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If the holding was too *small*, it failed to support the peasant and his family, in which case their condition became worse. If it was too *large* (*i.e.* in relation to the resources and ability of the peasant) then it was under-cultivated, with the same deplorable result. A holding that was just "of sufficient productive capacity to support a family at a *reasonable standard of comfort without help from outside sources*" came to be recognized as an 'economic' holding and the great object of the land policy was to divide land into such 'economic' holdings where it could not be aggregated into larger units for capitalistic farming. In addition to creating such 'economic' holdings efforts were made to improve the condition of the Irish peasantry by (a) encouraging emigration to the New World, (b) by encouraging migration to the industrial towns in the north of Ireland (c) by supplying subsidiary occupations to the poor and (d) finally, by putting a new life and hope in their heart by starting the Co-operative Movement at the initiative of Sir Horace Plunkett.

In other countries also similar comprehensive programmes of agrarian reform have been put through under public agency, and generally, at public cost. In *Prussia* a Land Commission was created as early as 1880 for the consolidation of holdings and the improvement of land. Subdivision of consolidated blocks was not allowed except with the sanction of the Commission. In *Switzerland* there is a law by which land in a particular locality when it comes to suffer from excessive subdivision can be *compulsorily* restripped (*i.e.* the scattered holdings are consolidated) when more than two-thirds of the persons interested in the land are agreeable to such a

proposal. In *Denmark* and *Sweden* Land Commissions have been at this problem for many years now and extensive areas have been restripped. In *Russia* until recently land was held jointly by families on a system analogous to the Hindu joint family system, with the resulting inefficiency and backwardness of agriculture. Important agrarian legislation was undertaken in 1906 by which collective family ownership of land was abolished and the head of the family was made the free and independent owner of the holding and by the same legislation consolidation of holdings was inaugurated. As a result of these measures considerable improvement in agriculture is reported. Even in *Japan* a Land Commission was established for the interchange and restripping of holdings, and for the construction of roads and irrigation works.*

This consolidating movement achieved great success in European countries because (a) it made possible *intensive* cultivation, and in a few cases, large-scale farming; (b) the need for it was genuinely felt by the people; (c) this movement was accompanied by the Co-operative Movement; (d) the State also organized cottage industries, *e. g.* in Japan, which supplemented the income of the petty cultivators; and finally because (e) the superfluous population displaced from land was absorbed in growing industrialism or drained off by emigration.

(7) REMEDIAL MEASURES IN INDIA.—Turning now to conditions in India we find, in the first place, that there is no popular demand for consolidation. There is no general desire for capitalistic farming on a large scale, or for intensive farming. India resembles

* For detailed information Cf. Appendix II to Mr. Keatinge's *Agricultural Progress*.

most older countries of the world in the small size of holdings. But, as Mr. Calvert says,* "Where it seems to be peculiar is that the owners prefer to cultivate smaller parcels of land than they need. It is probably correct to say that every owner of more than 25 acres lets part of it to a tenant. There is no effort to achieve large-scale farming, even by those who can do it on their own land. Similarly tenants seldom attempt to cultivate more than 25 acres, although more may be available. If any one obtains a lease for a greater area he sublets a portion."

Secondly, the idea of consolidation is comparatively new even on the European Continent and it must be applied to India with due regard to peculiar conditions. There is not sufficient land to go round for all those who are *directly* dependent upon it for maintenance and occupation. We have seen before that the cultivated area is less than 1·3 acres per cultivator, *i.e.* 4 to 5 acres per cultivator's family. Now under Indian conditions 'dry' land from 20 to 25 acres and 'wet' land from 5 to 7 acres would be sufficient to support a family. It would be then seen that a consolidation of holdings on this plan would displace more than half of the existing population from land. Where is it to go? What is it to do? Even those that remain upon land will remain idle for more than six months of the year, especially if the land be 'dry'. Hence the wasteful habits of the Indian villagers in the use of time and the excessive number of idlers among them. Further, what equilibrium there may be between the number of people engaged in agriculture and the land available to them is rudely disturbed by famine or other calamities.

* H. Calvert: *Wealth and Welfare of the Punjab* : p. 75.

Not only is there *less* food available but the only occupation by which the rural population could earn the wherewithal to purchase that food is lost. Successive Famine Commissions have drawn attention to this aspect of Indian famines. "A main cause of the disastrous consequences of Indian famines, and one of the greatest difficulties in the way of promoting relief in an effectual shape is to be found in the fact that the great mass of the population directly depends upon agriculture, and that there is no other industry from which any considerable part of the community derives its support. The failure of the usual rain thus deprives the labouring class as a whole, not only of the ordinary supplies of food obtainable at prices within their reach, but also of the sole employment by which they can earn the means of procuring it. The complete remedy for this condition of things will be found in the development of industries other than agriculture, and independent of the fluctuations of the seasons."*

Leaving aside for the moment the possibility of starting organized industries, we must emphasize the important part of *subsidiary* industries in solving the problem of subdivision and the resulting poverty of the small cultivator. In European countries animal husbandry is an important industry. In Japan every cultivator has sericulture as a second string to his bow. In other countries cottage industries of various kinds have been built up. In India the small cultivator is sticking to wasteful methods of *extensive* cultivation without resort to subsidiary occupations. This

* *Famine Commission Reports, Part I.* (1880) : p. 34.

means poverty and starvation. Mr. Calvert truly says : * “ The Punjab small holder, in short, is trying to make a living out of his few acres without the aid of animal husbandry or domestic industries, a task which nowhere in the world seems to have been accomplished with any profit ”.

In view of the insufficiency of land, and the absence of subsidiary occupations, any proposal to bring about a *radical* readjustment of holdings to make them of the ‘ economic ’ size, or of a size sufficiently large to make ‘ capitalistic ’ agriculture possible must be set aside as impracticable. Prof. Jevons has made such a proposal in his *Consolidation of Agricultural Holdings in the United Provinces*. The advantages of capitalistic farming are obvious but they cannot be had at once in a country like India. As we have seen before, there is no *popular* demand for consolidation, no outlet to the displaced population in the industries or in ready-made schemes of colonization.

The idea of consolidating the *fragments* by mutual exchange is more feasible. This does not raise the complex question of the right size of the holdings that result from consolidation. Consolidation of fragments can be effected by permissive legislation and by the creation of Land Commissions, or by the formation of Co-operative Societies for the purpose. As an illustration of the first method we may refer here to the Bill at present under consideration in the Bombay Legislative Council. It has a two-fold object : prevention of further division and fragmentation, and secondly the consolidation of existing

* Calvert : *Wealth and Welfare of the Punjab* : p. 78.

fragments. For the first purpose District Committees are to be formed which will determine the standard *minimum* size of the holding for the whole district or parts thereof. Holdings less than the standard size are to be declared as fragments which can be transferred only if they lead to consolidation and not further fragmentation. Nothing prevents a man from coming into possession of fragments, but he must either *sell* or *lease* them to his neighbour. He cannot *cultivate* them. This is bound to prevent further fragmentation. For effecting consolidation of *existing* fragments, two-third of the occupants and one-half of the owners must give their consent to a proposal. Holdings will be consolidated by the exchange of fragments. Holdings of the standard size may not be touched. The Bill is a modest measure and practicable so far as legislation provides a remedy for the evil under consideration.

Turning now to the other method we find that it is in the Punjab that Co-operation has achieved appreciable results. "In three years 133 consolidation societies have been formed with 500 members, and 35,000 scattered parcels of land have been consolidated into 4,500. The area thus restripped up to the end of 1925 was about 50,000 acres. Large areas which were formerly uncultivated owing to excessive fragmentation have been brought under the plough. The general effect of consolidation is to increase the product of land, stimulate the desire for improvement, increase rent and decrease causes of litigation and quarrels."* Mr. C. F. Strickland, I.C.S. who rightly distinguishes between the creation of 'economic

* *India in 1925-26* : p. 153.

holdings' and 'consolidation of fragments' and regards the latter alone as feasible on the co-operative principle describes in his *Studies in European Co-operation*, Vol. II what has been accomplished in this direction in Norway and Sweden.

If the economics of consolidation is properly understood, it is clear that legislative or Co-operative efforts must be accompanied by other measures. Thus (a) Reclamation of waste lands, (b) colonization of land that may be available for cultivation, (c) substitution of *intensive* for *extensive* cultivation, (d) organization of cottage industries to enable the small holders to eke out their agricultural income by resort to them, (e) the Co-operative Movement as a further assistance in making agriculture or cottage-industries more remunerative and finally, (f) the growth of large-scale industries to absorb portion of the population that may be displaced from land,—these may be enumerated.

(C) LIQUIDATION OF DEBTS

(8) CAUSES OF INDEBTEDNESS—When fragments have been consolidated by legislation or Co-operation one cause of the present low productivity of land will have been removed. But the strength of a chain depends upon the weakest link. We must, therefore, refer to other causes of the inefficiency of Indian agriculture and one is to be found in the indebtedness of the cultivator. It is nothing less than *his* fragmentation. He is not able to order his economic life as he would; he is not able to retain for himself the fruit of his labour which he has to share in diminishing proportions with his money-lender.

Rural indebtedness is as old as agriculture itself.

It prevailed in India in pre-British days. It was aggravated by the economic transition now taking place in the country. The small size of the holdings and fragmentation must needs throw the cultivator into the clutches of the money-lender. This becomes all the more inevitable when famines occur and the cultivator loses everything. He has to start afresh with borrowed capital. But though the money-lender was indispensable in pre-British days, he laboured, as Mr. Darling points out, * under two restraints which the British Rule either removed or weakened. The restraints were (a) the existence of a vigorous village community which, as it tolerated the money-lender as a necessary evil, put check upon his rapacity. (b) The second check was the apathy of the State towards recovery. In the absence of legal and efficient processes for the recovery of principal and interest, the money-lender would moderate his demand rather than antagonise the debtor into a persistent defaulter by an unconscionable claim. There was a spirit of accommodation between the two as the one could not do without the other. This spirit was destroyed by the setting up of regular Civil Courts, the enactment of laws about Contract and Limitation, their administration by a set of judges trained in Western jurisprudence and ignorant of rural conditions in the country and finally, by the rise of the pleader class.

Other causes added to the *occasions* for borrowing. First there was *the rise in prices*. It has been shown by Dr. Mann† that rising prices do not necessarily benefit

* Mr. Darling : *The Punjab Peasant in Prosperity and Debt* : p. 203.

† Cf. Dr. Mann : *Land and Labour in a Deccan Village Study*, No. 2.
Ch. VIII.

all agriculturists. Those whose holdings are large and who employ their own capital and labour gain. But the small or indebted cultivators fail to derive any advantage from rising prices. The conclusion, so far as it could be drawn from the study of a single village, was that rise in price *lowered* the economic position of the cultivators of 'uneconomic holdings' and it widened the gulf between the solvent and insolvent classes, the solvent becoming more solvent and the insolvent more insolvent. Again, any *temporary* rise in the standard of living due to a spell of agricultural prosperity tends to become permanent. If the cultivators cannot *produce* more to pay for that higher standard they are tempted to *borrow* especially if they have any credit. Extravagance on marriages and other ceremonies and the improvident habits are further additional causes.

The foregoing causes explain the *occasion* for a loan. The *volume* of one's indebtedness is determined by one's credit. One of the remarkable phenomena connected with the economic transition has been the rise in the value of land and of all rights—proprietary or tenancy—connected with it. This was due to many causes. Rights in land were more precisely defined and carefully recorded and became easily transferable. The rights themselves became more valuable because of the rise in agricultural prices and the moderation of the demand of the State on the produce of land. Finally, there was devoted to the acquisition of landed rights a larger fund of capital. In the comparative absence of opportunities to invest the growing wealth either in industrial concerns or Government paper, the wealth was directed towards the acquisition of land which consequently rose in value. The expansion of credit

came in the wake of the rise in land-values and it came with great suddenness upon a population hitherto unaccustomed to large credit, and the consequence has been the transfer of land from the agricultural to the money-lending classes. The social and economic dangers of this process are obvious. The new purchasers of land are not interested in the improvement of land but only in rack-renting the expropriated peasants. This evil assumed serious proportions in Bombay, Sind, Central Provinces and the Punjab. Mr. Darling has well brought out the connection between enhanced credit and growing debts. The link between the two was the money-lender. Freed from the restraining influence of the village community and encouraged by the facilities offered by the Civil courts he proceeded to lend his increasing funds to the cultivator as the credit of the latter also increased *pari passu*. "In a word money was plentiful, security good, credit easy and borrowing uncontrolled."*

We may finally refer to the vicious system of the money-lender to keep a running account with the borrower, to make him advances in kind, receiving the principal and interest in kind, and charging him exorbitant rates of interest. The Law of Limitation compelled the lender to renew the promissory notes, every time adding to the amount of the debt. On this account even a small debt grows with mysterious rapidity in India.

(9) ESTIMATES OF ITS VOLUME—It is impossible to give within the limited space available any adequate idea of the amount of indebtedness in the country. Certain writers have made calculations with

* Dr. Darling: *The Punjab Peasant in Prosperity and Debt* : p. 236.

regard to selected areas, *e.g.* Sir F. Nicholson (Madras Presidency, total debt=45 crores. But the figure is thirty years old and is now meaningless); Mr. Darling (90 crores for the Punjab 1924-25). As Mr. Darling's enquiry was comprehensive and is also the latest one, we may summarise its results thus. The enquiry extended to 43,020, proprietors (large and small) and 11,500 tenants (occupancy tenants and tenants at will). Those who owned more than 8 acres were classed as large proprietors.

RESULTS OF MR. DARLING'S ENQUIRY.

	No.	% free of debt	% Mortgage debt to total debt	Average debt	Debt's multiple of land revenue
Large proprietors	25,840	18	40	Rs.570	10
Small „	17,180	17	40	„ 310	27
Tenants (occupancy)	4,000	20	25	„ 290	...
„ at will	7,500	22	...	„ 135	...

As there are a million tenant families in the Punjab, Mr. Calvert calculates their total debt as 15 crores (Rs. 150 per family). The debt for the *proprietors* is equal to Rs. 75 crores. Thus the total agricultural debt for the province of Punjab amounts to 90 crores. This work out at Rs. 76 for head of the *agricultural* population, or Rs. 31 per *cultivated* acre. If we take the average rate of interest as 15 *p.c.* the annual interest charge amounts to 13½ crores, which is nearly three times as great as the whole land revenue of the

province (Rs. 4·86 crores). If we take the Punjab figures as our basis (*i.e.* total debt = 90 crores = 19 times the land revenue), the total debt for the British India = $(19 \times 35\cdot45 \text{ crores, the total land revenue}) = 674$ crores. As Mr. Darling regards the Punjab more indebted than the other provinces, he puts the figure for the total agricultural debt of British India (including Burma) at 600 crores of Rs.*

What is distressing about this amount is not its magnitude but its *unproductive* character. Only a fraction of this amount represents productive loans. The rest is improvident loans swollen by the accretions of excessive interest.

The Bengal delta—one of the most fertile tracts in the whole of India—has its burden of debt. With regard to it Prof. Panandikar makes the following observations:† “Even if the total amount of indebtedness in the delta is not considered to be too large, there can be no doubt that, on account of the very high rates of interest, it is a heavy burden on the resources of the cultivators, especially as only a small portion of it can be regarded as capital employed productively. From careful enquiries the total annual interest in the delta as whole may be estimated at $\frac{1}{3}$ of the total produce of the soil, at 5 times the total amount paid to the landlords as rent, or at a little less than $\frac{1}{4}$ of the cultivators’ average share in the produce.”

As a major portion of this interest is withdrawn from agriculture it represents a great drain on the wealth of the Delta.

* Cf. Ch. I of Mr. Darling's book.

† *Wealth and Welfare of the Bengal Delta* : p. 182.

(10) REMEDIES.—Turning now to the remedies adopted by Government in the past we may say that they were of various kinds. It was thought that if the masses became more literate, they would be more thrifty and they would borrow for productive purposes only. Hence the efforts of Government for the spread of education, for starting Savings Banks in the Post Offices, and for making the policy of collecting land revenue more *elastic* by allowing the suspension or remission of the Government demand as required by the state of the crops. But the results achieved have been inappreciable. Government next proceeded, *e. g.* by passing the Deccan Agriculturists Relief Act (1879), to protect the debtors against the unfair claims of the money-lender by allowing the Courts to 'go behind' the transactions. But this measure proved barren of results. Indebtedness has *increased* rather than decreased. Thirdly, in some cases and on some occasions Government directly advanced loans for the relief of the agriculturists. Thus in the case of encumbered estates (of historical importance) belonging to landlords in Gujerat, Oudh, Ajmere, etc., Government advanced large sums to free these estates from debts. Similarly, in the case of estates managed by the Courts of Wards Government arranges for the repayment of debts. Similarly whenever famines break out Government make liberal advances under the name of *takavi* for the improvement of land or for the purchase of seed and cattle. But it is clear that *takavi*, though invaluable as a temporary relief to the cultivator, cannot solve the problem of indebtedness. A single famine means loss of crores of rupees worth of crops, and widespread unemployment. *Takavi* loans would be like

a drop in the ocean; nor have these loans any *educative* value. Government's next measure for mitigating indebtedness has proved still more controversial. Thinking that the root of the mischief lay in the enhanced credit of the borrower, Government proceeded, at first in the Punjab, in 1901, to restrict the right of the peasant to alienate his land. This measure decreased the credit of the ryot. The Punjab peasants could sell or mortgage their lands *only* to agriculturists. Thus the land-grabbing in which the money-lending class was indulging was partially checked. But this Act provoked a great deal of opposition even at the time of its enactment, and has not escaped severe criticism since then. Thus Mr. Darling has pointed out* that the place of the professional non-agriculturist money-lender is being taken up by a new class of 'agriculturist' money-lenders. Again as the non-agricultural class is permanently precluded from coming into the possession of land, all improvement in agriculture is retarded. That this measure of restricting the right of alienation did not prove the panacea it was expected to prove would be clear from the reluctance of the Bombay Government to apply it to all land as desired by the Government of India. In Bombay the unoccupied land in certain districts was being granted to the cultivators as a restricted tenure. But the measure had proved highly unpopular. They, therefore, pointed out† in January 1911 to the Government of India "that it would be politically unwise to raise so contentious a proposal at the present time and (proceeded) to argue that the evil of transfer

* *Op. cit.* Page 190.

† Sir E. D. MacLagan's *Note on Agricultural Indebtedness in India* : p. 16.

to non-agriculturists is not great and is abating and other remedies for indebtedness are making good progress."

These *other* remedies were none other than, chiefly, the Co-operative Credit Movement to which we turn in the next section.

(D) THE CO-OPERATIVE MOVEMENT

(II) BASIC PRINCIPLES, HISTORY AND ORGANIZATION OF THE MOVEMENT—We saw in the preceding section how all the efforts made by Government brought little relief to the Indian ryot whose condition became wretched beyond description. And then the idea arose that the real solution of the problem lay in the principle of Co-operation. This Movement had worked wonders—in Germany, Italy, Denmark and Ireland. It was realized that, as in Ireland, "the real problem is one of poverty; not only economic poverty but also poverty of individual character and of social life."* Poverty cannot be reduced unless the character of a people is raised. "The wealth of a nation lies, not in the material resources at its command, but in the energy and initiative and moral fibre of its people. Without these attributes no country can become permanently prosperous; with them no unfavourable circumstance can long prove an insuperable obstacle."† On the Continent this movement was initiated by popular leaders like Raiffeisen and in Ireland by Sir Horace Plunkett. In India the efforts made by certain ardent officials *e.g.* Mr. (later, Sir) Frederick Nicholson in the Madras Presidency, and

* *The Rural Reconstruction in Ireland.* By Smith-Gordon & Staples : p. 1. † *ibid* p. 16.

Mr. Dupernex in the United Provinces proved promising and the Government of Lord Curzon passed the Co-operative Credit Societies Act of 1904. It should be noted that this Act was passed when there was little actual experience to go upon in India; it was a measure of enlightened autocracy. The Movement was initiated in the light of European experience and since then India has derived the greatest benefit from the progress of Co-operation in the West.

In view of the difference in conditions under which the movement was started in different countries and the manifold forms it has assumed in the course of its development it is difficult to give, shortly, its connotation. In essence, however, it is a movement for the economic (and indirectly, moral) development of those who participate in it. Mr. Calvert, after reviewing a number of authoritative definitions, concludes that the following four principles lie at the root of co-operation: as the members are generally poor, their basis of association cannot be capital, but their common humanity. Accordingly, members of a Co-operative Society join as human beings and not as capitalists; secondly, they meet on a basis of equality; thirdly, the act of association is a voluntary act; and fourthly, the members join to promote the economic interests of themselves, and not of anybody else. Mr. Calvert accordingly defines Co-operation "as a form of organization wherein persons voluntarily associate together as human beings, on a basis of equality, for the promotion of the common interests of themselves."*

The original object of the movement as started in India was to enable the rural masses to secure cheap

* H. Calvert: *Law and Principles of Co-operation*: p. 13.

credit through co-operation. Societies were divided into rural or urban according as they were meant for the agricultural or the artisan class. But in course of time the scope of the movement widened: societies were started for the purchase and distribution of commodities (*i.e.* for non-credit purposes), and secondly, with the growth of primary societies (rural and urban) the need was also felt of starting central societies to supply capital to the primary societies. The progress of the movement in the year 1911-12 can be seen from the fact that the number of societies was 8,177, with a membership of 403,318 and with a working capital of 3.36 crores of Rs.* By the Co-operative Societies Act that was passed in 1912 "Co-operative associations for other purposes besides credit were allowed; the old distinction between rural and urban societies was swept away, the registration of Unions, Central Banking Unions and Central Banks was legalized and other improvements introduced." Two years later, in view of the large financial interests involved in the movement (the working capital of the societies in 1914 was nearly 7.5 crores of Rs.), a Committee was appointed under Sir Edward MacLagan in October 1914 "to examine whether the movement, especially in its higher stages and in its financial aspect, is progressing on sound lines."† Its Report has shaped the co-operative movement in India during the past twelve years.

Organization of the Movement—At the bottom we have the *Primary societies*, agricultural or non-agricultural and credit or non-credit, according to the object

* *MacLagan Committee Report* : p. 4.

† *MacLagan Committee Report* : p. 5.

for which each was started. A primary society has to be a small body, for the members must know each other well, and must take active interest in the affairs, as each has an unlimited liability. The working capital of a society is derived from (a) the share capital, (b) deposits from members and outsiders, (c) loans and (d) reserve fund. The points of interest and debate are these: *First*, should co-operative societies have a share capital at all? In strict theory, association on a basis of capital is inconsistent with co-operation. But the shares are small in value, in some provinces they can be purchased in easy instalments, they cannot be held in large quantities. Again, they are an inducement to the villagers to save money; they reinforce the credit of the society and enable it to get loans on easier terms. *Second*, should the liability be limited or unlimited? The principle of co-operation is "self-help through mutual help" and interest in a society is strengthened if the liability is unlimited, at any rate in the initial stages. When a society has made great progress, when the principle of co-operation takes firm root in the habits of the people, and when the financial interests and responsibilities of the society become intricate, limited liability may prove expedient. *Third*, the paucity of deposits in the societies is a weak point in the Indian Co-operative Movement. Deposits form from 10 to 15 p. c. of their total working capital, whereas the proportion is 80 to 90 p. c. in Western countries. Deposits, so far as they come from members, are an index of the thrift they encourage, and so far as they are derived from outsiders, represent the confidence the public has in the movement. Outside deposits should be encouraged for they represent additional

resources. As the MacLagan Committee says :
 "Deposits imply thrift in the village, form good lying money, and they tend to interest in the management of the society a useful body of men who stand as sentries over their own deposits." The deposits should be derived from men with local interest. Efforts are being made to encourage deposits by offering very high rates of interest. There is risk in this. Compulsory deposits can be regarded only as a second-rate measure. *Fourth*, we should distinguish between deposits and loans. The difference between them is that a society obtains its deposits on terms prescribed by itself, whereas its loans are secured on terms laid down by the lender. The loans are obtained from the Central or Provincial Bank, from outsiders and, rarely, from other primary societies. *Lastly*, the Reserve Fund. This is formed by setting aside a fourth part of the annual profits. Such a Fund has many advantages. As the Government Resolution of 1914 on the Co-operative Movement puts them : "it supplies a source of income which may be drawn upon in loan years ; it fortifies outside confidence ; It protects members from money payments under their unlimited liability ; it cheapens credit ; and perhaps most important of all, it binds members together." The Reserve Fund may be invested in outside securities or, better still, in the ordinary business of the society.

As for *lending*, each society fixes the credit that is to be allowed to each member. Loans are made generally for productive purposes and also for meeting "expenditure that is inevitable and is not excessive in

amount.”* The commonest objects of a loan are cultivation expenses, purchase of cattle and payment of old debts. Loans have to be given for celebrating marriages, funerals and the like. They are necessary if societies have to become popular and prevent their members from resorting to the money-lender; they are useful as they indirectly educate members and discourage extravagance or improvidence. It is now admitted that a society should provide loans to a member to pay off his old debts to a money-lender. The old debts may be paid off at once or in instalments, though the latter method is preferable. But from the figures given in the last section it must have been seen that the magnitude of the old debts is so great that only a fraction of the embarrassed ryots can be freed by the co-operative movement. The security on which loans are made is primarily personal, for that is the principle of co-operation. But personal security might be reinforced by the pledging of movable or immovable property, or by the furnishing of sureties. These practices are not inconsistent with the co-operative principle. The rates of interest on loans made by the Societies which vary from 9 *p. c.* to 15 *p. c.* according to the provinces cannot be said to be high. They are *much* lower than the rates that prevail in the locality. It is not desirable that the rate should be abnormally low, for villagers, used to high rates, are likely to abuse cheap credit. Societies make short-term loans (*i.e.* repayable within a year) or long-term loans (repayable in a longer period). The members generally are in need of short-term loans. It is clear that in view of the limited funds at the

* *MacLagan Com. Report* : p. 38.

command of the societies, paucity of deposits, and personal security, co-operative societies of the usual kind cannot afford to give long-term loans on any adequate scale. It is equally clear that such loans are necessary for the permanent improvement of land and for the complete redemption of old debts. This points to the urgency of having societies—organized upon different principles—that will make such long-term loans. A word will be said about this in a later section.

With the growth in the number of primary societies new needs began to be felt—How supervise them and how finance them? There arose a spontaneous movement for the federation of societies and the Act of 1912 legalized and encouraged this movement. A group of societies would combine for the purpose of engaging a paid supervisor who was to supervise their work. Such a group is called a 'Supervising Union.' These 'Supervising Unions' are becoming quite popular in the Bombay Presidency and they are of great use to the Central Banks in their business of financing the primary societies. In Burma, especially, unions were formed not for supervision only, but for attracting cheap loans by each society standing as guarantee for loans made to any other society in the group. Such groups are called "Guaranteeing Unions." The union is a registered society and mutual guarantee is effected by making each constituent society liable for the default of another up to a recognized limit. The MacLagan Committee was in favour of unions of this kind and recommended their introduction in other provinces. But the guaranteeing unions have not become popular outside Burma, and to some extent the Central Provinces. The next stage in the federation

of societies is represented by the formation of a Central Bank—generally for a district. The Central Bank's primary object is to finance the societies, and incidentally to balance their funds, *i.e.* to take over money where and when it is plentiful and distribute it where and when it is lacking. In India the function of supplying outside capital to the primary societies is far more important than that of balancing their funds. In the West the reverse is the case. The Central Banks must have, therefore, a larger share capital and attract more deposits. The share capital can be subscribed entirely by individuals, or entirely by primary societies, or by both in varying proportions. If the shareholders are private individuals the bank would be an ordinary joint-stock bank and is out of place in the co-operative movement. If the societies alone subscribe, the resources will be limited and inelastic. The MacLagan Committee was therefore, in favour of Central Banks of the 'mixed' type. The societies are represented on them, and at the same time the banks attract outside capital and derive advantage from the participation of the educated middle class in the movement. As in the case of primary societies, the working capital of such banks is derived from (a) shares, (b) deposits, (c) loans and (d) the reserve fund. The deposits are generally got from the urban middle class and the well-to-do landholders residing in the towns. It cannot be said that the Co-operative Central Banks enter into an unhealthy competition with the ordinary joint stock banks. So far as they tap new sources, they are wholly beneficial and even if some diversion of deposits from the other banks has taken place, the harm is small and temporary. If the habit of hoarding is to

be broken "one of the few promising ways of setting about it seems to be to work through co-operative banks and, as it were, coax capital out of its hidden repositories." * The loans are obtained from the Provincial Co-operative Bank, and, rarely, from other Central Banks or Government.

With the growth of Central Banks the need was felt of a Provincial Bank that would do the same service to the Central Banks as the latter were doing to the primary societies. It was in this connection that the MacLagan Committee made its most important suggestions as to the constitution and functions of a Provincial Bank which will be at the apex of the co-operative movement in a province and "which will co-ordinate and control the working of the Central Banks, forecast and arrange for the provincial requirements as a whole, and be the financial co-operative centre for the province."† The share capital of the Provincial Bank has been subscribed entirely by societies in the Central Provinces and Bengal, and by individuals and societies in other provinces. The Provincial Bank makes loans to the primary societies through a Central Bank, or directly to them where Central Banks do not exist. The Provincial Bank attracts a great deal of outside capital for the benefit of the co-operative movement. It is also the channel through which the co-operative movement gets loans from the money-market. The ordinary joint-stock banks and the Imperial Bank of India help the Provincial Bank by giving cash credits, or loans for a fixed period. But the extent to which the Provincial

* *Agricultural Co-operation in India*, by Dr. Mathai : p. 95.

† *MacL. Com. Report* : p. 95.

Bank can get accommodation from the money market is limited and at present one of the main problems of co-operative finance is to bring the movement into effective touch with the money market. A word will be said about this in the last part of this section.

(12) THE STATE AND THE CO-OPERATIVE MOVEMENT—It is no doubt a paradox that the Co-operative Movement in India should have been initiated, fostered and controlled by the State. In Europe it was essentially popular in origin and the Governments recognized and patronized it at a late stage.

By the Act of 1904 a Registrar was appointed to initiate the movement, and to guide and control it. He is a whole-time officer generally drawn from the Civil Service and is at the head of the Department. "Under the Act it is the duty of the Registrar to receive and inquire into applications for registration; to register the bye-laws of societies and amendments to them; to audit the accounts or cause them to be audited; to make a valuation of the assets and liabilities of societies and prepare a list of overdue loans; to see that the Act, Rules and Bye-laws are observed; to make special inspections when called upon to do so; to dissolve or cancel societies and to carry out their liquidation."* In addition he has to do every thing in his power to popularise the movement. Indeed he is the pivot of the movement in his province. He is more than a mere official or bureaucrat; he is the guide, friend and philosopher to that movement.

In addition to bearing the cost of the Co-operative Department the Local Governments have, under the

* *MacL. Com. Report* : p. 108.

Act, extended certain concessions and privileges to the societies. They are either judicial or fiscal in character. Thus societies have the prior claim of recovering their dues (after the claims of the State have been satisfied); the shares and interest of members are exempt from attachment; and the term 'co-operative' can be used exclusively by societies registered under the Act. Societies have been exempted from fees payable under the Registration and Stamp Acts and payment of the income-tax. Minor conveniences in the form of custody, withdrawal and transfer of funds are extended to them.

Direct financial aid is not given except under rare circumstances. Thus occasionally small sums are advanced to encourage the formation of new societies. The Bombay Government guaranteed a rate of 4 *p. c.* interest on the debentures issued by the Provincial Co-operative Bank. And during the War advances were made to some hard-pressed societies as a special case.

But though Government does not give direct financial help to the societies it is making increasing use of them for the distribution of such help to the ryots. An important item of famine relief is the distribution of *takavi* loans for the purchase of seed, cattle and the like or for improvement of the land. There is advantage in making such loans *through* a society. The Revenue Department is spared a great deal of preliminary enquiry and minute accounting; the advances are more effectively utilized on account of the local knowledge of the society; the society, by charging a slightly higher interest to the recipient, makes a handsome profit for its service and trouble. It should be noted that the society is simply a channel

for the distribution of the loans and the society *qua* society is not liable to Government.

Government exercises general control over the movement. In this work the Registrar is helped by a staff of supervisors, inspectors and auditors. The object of the audit is to see if the societies are going on sound lines. The Act requires an annual audit of each society. The societies pay for the audit though the auditors are under the control of the Registrar. "The audit is meant primarily for Government through whose agency the societies were started, and only secondarily for the satisfaction of the Central Banks and outside investors who have entrusted money to the movement and of the society members themselves."* 'Inspection' is not a periodic thing but is held at the instance of a creditor of the society, or of the Collector, or of members of the society. 'Supervision' on the other hand "implies the duty of instructing the members in co-operative principles and the propagation of the movement by the organization of new societies."† Its object is educational and not corrective or punitive. The processes of audit, inspection and supervision differ from each other as to the time at which they are held. "Supervision is continuous, audit is periodical and inspection is occasional."‡

When societies came to be started for non-credit purposes *e.g.* for the purchase of seed, manure, implements they felt the need of technical advice in the matter. Government helped such societies by placing at their disposal the technical advice and machinery of the Departments of Agriculture,

* *MacL. Com. Report* : p. 56-57.

† *MacL. Com. Report* : p. 60.

‡ Mathai : p. 125.

Irrigation, Industries, Forests, Fisheries and the like. These Departments—particularly the Agricultural—have found in the societies the best agents for conveying the results of their research to the ryots. Improved seed, improved machinery, improved cattle have been introduced through the Co-operative Societies.

(13) PROGRESS OF THE CO-OPERATIVE MOVEMENT IN BOMBAY AND THE WHOLE OF INDIA—By way of giving definiteness to the preceding description we may next refer to the progress of the Movement in the Bombay Presidency, and give statistics for the whole of India.

Bombay is the first province to pass (Act VII of 1925) a Co-operative Societies Act under the Reforms according to which Societies are divided into five classes: *Resource* Societies, for obtaining for their members the credit, goods or services required by them; *Producers'* Societies for producing and disposing of goods; *Consumers'* Societies for obtaining and distributing goods to members, and occasionally, to outsiders; *Housing* Societies for providing accommodation to members in the larger towns; and *General* Societies for objects that do not fall under any of the heads mentioned above.

In 1924-25 the Department consisted of a Registrar, seven assistant registrars, nine agricultural organizers, one industrial organizer and a set of auditors. The agricultural and industrial organizers pay attention to the non-credit societies. In this year the Government spent five lacs of rupees on this Department.

Interesting points about the development in Bombay are: efforts made to encourage thrift by *compulsory* deposits; instruction of the members of the

managing committees in the principles of co-operation; the 'guaranteeing unions' are few in number in Bombay, but the 'supervising unions' are becoming more popular. The older and more stable societies are being encouraged to give loans for the redemption of old debts. The societies are used for the distribution of *takavi* loans. The agricultural non-credit societies have for their object the supply of seed, implements, manure and the like. The Cotton-sale Societies with transactions running into half a crore of rupees are a distinct feature in the Bombay presidency. Among the non-agricultural credit societies are the urban banks supplying credit to Government servants, railway employees and the middle classes. As in other provinces the Central Banks are proving most useful in providing credit to the primary societies, and at their top is the Provincial Co-operative Bank. It may issue shares to the value of 7 lacs of Rs. On the basis of this amount it may issue debentures to an amount not exceeding three times the paid-up capital bearing 4 *p. c.* interest which is guaranteed by Government. The bank cannot charge more than 8 *p. c.* as interest to the Societies. The bank has played a very important part in the development of the Co-operative movement, and indirectly it has done a great deal for the improvement of agriculture also.

Propaganda work is done by the Bombay Central Co-operative Institute which has got a few branches. It holds conferences, conducts magazines, holds classes for instruction in co-operation and in other ways helps forward the movement.

The following table gives statistical information about the movement in the Bombay presidency for 1925-1926.

DIFFICULTIES & REQUIREMENTS OF AGRICULTURE 221

	No. of Societies	Members	Paid up capital 000 Rs.	Loans & Deposits 000 Rs.	Reserve Fund 000 Rs.	Profit 000 Rs.
Provincial Bank	1	—	9,65	1,06,73	4,13	1,04
C e n t r a l Banks	19	—	20,52	1,54,51	3,38	2,64
Supervising and gua- ranteeing Unions	87	—	—	—	—	—
A g r i c u l - tural So- cieties	3877	271,765	14,67	2,69,93	30,17	2,37
Non-a gri- cultural	671	166,460	58,22	1,93,84	12,92	7,14
Total ...	4655	438,225	1,03,06	725,01	50,60	13,19

Progress of the Co-operative Movement in India in 1915-16 to 1925-26
as to number of Societies and Membership.

		Average for 5 years 1915-16 to 1920	Average for 5 years 1920-21 to 1925	1925-26
Central (including Provincial and Central Banks and Banking Unions) ...	<u>Banks & Unions</u> Members	{ 304 89,925	506 163,822	567 197,930
Supervising and Guarantee- ing Unions ...	<u>No. of Unions</u> <u>Affiliated Societies</u>	{ 638 10,971	1,302 24,437	1,406 31,205
Agricultural (including Cattle Insurance Societies)	<u>No. of Societies</u> <u>Individual</u> Members	{ 25,873 902,930	51,716 1,661,098	71,140 2,327,899
Non-agricultural ...	<u>No. of Societies</u> <u>Members</u>	{ 1,662 226,031	4,183 493,509	7,062 730,126
Total ...	<u>No. of Societies</u> <u>No. of Members</u> <u>of Primary</u> <u>Societies</u>	{ 28,477 1,128,961	57,707 2,154,607	80,182 3,058,025

Financial Progress of the Co-operative Movement in India

		Average for 5 years 1915-16 to 20	Average for 5 years from 1920-21 to 25	1925-26
<i>Figs. in Thousands of Rs.</i>				
Share Capital, paid up	...	2,51,97	5,25,66	7,80,65
Loans & Deposits held at the end of the year from <i>members</i> ...	...	96,35	2,54,45	3,88,61
Do. from Societies...	...	47,81	1,49,98	2,02,18
„ from Provincial or Central Banks	...	5,03,19	12,29,88	19,21,90
„ from Government	...	25,58	67,69	1,38,04
„ from non-members & other sources	...	4,70,25	10,96,22	18,16,00
Reserve & other Funds	...	1,23,32	3,12,38	5,13,01
Total Rs. ...		15,18,47	36,36,26	57,60,39

(14) ACHIEVEMENTS AND DESIDERATA—The official report showing the progress of the movement in India during the year 1925-26 points out that there were 567 central banks, with a working capital of 25·83 crores and their *net* profits during the year were 43·33 lacs of Rs. The total number of societies was 80,182, with a membership of 3,058,025 and a working capital of 31·78 crores. Their *net* profits during the year were 1·19 crores of Rs. The total working capital in the movement was 57·60 crores of Rs. If we took 5 *p. c.* as the difference between the rates charged by the money-lender and the co-operative societies (a very modest estimate), it means that more than 2½ crores of Rs. were saved by way of interest to the class of producers that took advantage of the movement. But co-operative societies not only *directly* lessen the rate of interest, but the money-lender is forced, by competition, to moderate *his* usurious rate also. The Co-operative Movement has proved the most potent lever for agriculture improvement, though the results are too general to be presented in a statistical form. Thirdly, the movement has distinctly reduced the horrors of famines and other disasters to the rural population. Just think of what the Movement is doing for flood-stricken Gujerat! The co-operative net-work makes it possible for Government aid—in the form of *takavi* loans for purchase of seed, agricultural improvement and the like—to go *much* longer than would have been otherwise possible. The paid-up capital and deposits are an index of the habit of thrift the Movement encourages. Of the *moral* results of the movement—the business habits it forms, the extravagance it checks, the sense of civic duty it engenders, the spread of education and improvement in sanitation

it directly helps, it is not possible to give any *quantitative* estimate. We might go so far as to say that the starting of a co-operative society in a village is like introducing the leaven of a new life in it. If it evokes that popular enthusiasm which it ought to, and if it is properly directed, the Co-operative Movement should furnish a solid foundation for the rural reconstruction of the country.

After having stated what the Co-operative Movement has hitherto achieved, it is time to say something about the direction in which it should be supplemented and extended to make it a more powerful means for the promotion of rural prosperity. We have seen that co-operative societies cannot give long-term loans to any appreciable extent, and also their scale of business will be restricted until the whole Movement is brought into effective touch with the money market. Let us see how these two objects can be achieved.

Long-term loans are wanted for the redemption of old debts and mortgages and for the permanent improvement of land. Some writers, *e.g.* the Hon. Sir D. E. Wachha, think that the co-operative societies cannot touch even the fringe of the problem of indebtedness. "The indebtedness of the agriculturist is so colossal while the resources by way of capital of the societies are so extremely limited and hedged in by restrictions and limitations that there never can be any emancipation of the ryot from the slough of indebtedness."*

Sir D. E. Wachha recommends the establishment of an Agricultural Bank or Banks for India on the

* *Agricultural Banks in India*, by D. E. Wachha : p. 23.

model of the Agricultural Bank of Egypt. This Bank is European in constitution and management and enjoys certain important privileges from the Egyptian Government in the shape of finance, guarantee of interest, use of state agency for the recovery of advances and interest. We shall consider in the 13th Chapter the advantages and disadvantages of allowing foreign capital to develop our industries. It is sufficient to state here that there is danger in allowing a powerful foreign institution to dominate such a vital industry of our country as agriculture. This remedy for removing indebtedness would prove worse than the disease. Proposals for starting English banks for agricultural purposes were frequently made in the past but the Provincial Governments or the Government of India did not entertain them favourably, and the reply which the Punjab Government gave in 1908 to one such proposal is as forceful to-day as it was twenty years ago. "Such a proposal is open to economic, administrative and political objections. In the first place it was represented that the facilities for debt would be encouraged. Secondly, the Bank would have to work with an English agency, and the interest allowed under the conditions was too high in view of the fact that the banks would gain the assistance of Government officers. It was further urged that it was politically objectionable to place the welfare of the people in the hands of a powerful bank which had its head quarters in London and was able to influence the Secretary of State. It was urged that the arrangement would be unpopular with the money-lenders on the ground that it would interfere with their business, with the agriculturists on the ground that it would entail constant process for

the recovery of arrears, and with the educated classes on the ground that it would be represented as an exploitation of the Indian agriculturist for the benefit of an English Company."* If foreign capital is to be used for the development of agriculture, certain conditions must be first fulfilled the nature of which will be considered in the 13th Chapter

In lieu of agricultural banks with external capital and under foreign control, we should encourage the formation of *Land Mortgage Banks* on the Co-operative basis. Valuable information as to their constitution, functions and working in certain European countries is to be found in Mr. C. F. Strickland's *Studies in European Co-operation* (2 Vols. 1925). Their primary object is to enable the owners of land who form the society or bank to get long-term loans on the security of their land. The value of land is carefully appraised and loans are given to the extent of half the value. Provision is made for the payment of interest and amortization of the loan. The bank gets the loans by the issue of bonds, the interest on which is sometimes guaranteed by Government. It also takes long-term deposits. The ordinary commercial banks have been encouraged to look upon such bonds as excellent security on which to advance loans and thus the capital required for land-improvement or redemption of debts is made available in immense quantities. A beginning has been made to start such Co-operative Land Mortgage Banks in the Punjab and Madras and they are an indispensable adjunct to the Co-operative Movement. Such banks need not necessarily be distinct from the Co-operative Societies.

* E. D. MacLagan's *Report on Agricultural Indebtedness in India*: p. 25.

As Mr. Strickland points out* the existing Co-operative Societies furnish "a strong and precious foundation of co-operators on whom a system of mortgage credit can be built up. It is unreasonable and wasteful to start again from the beginning with mortgage credit, as though the same person would not normally, or at least frequently, avail himself of both types of co-operative assistance. Consequently I prefer to connect the Mortgage Bank closely with the primary societies of credit, and arrive at the mutual knowledge and supervision of members through the village credit society."

The next desideratum is to bring the Co-operative Movement in touch with the money market. The demand for credit for agricultural purposes is remarkably seasonal. For part of the year the provincial co-operative bank has funds which it cannot utilize; in the busy season its resources prove absolutely inadequate. There should be some means by which the provincial bank will be able to draw upon the ordinary money market for additional credit. At present, as a result of private arrangement and on personal considerations, the Imperial Bank gives a certain 'cash credit' to the provincial banks and the joint-stock banks make loans for fixed periods. But this arrangement is inadequate. One way of getting over the difficulty would be to form an All-India Co-operative Bank (with important concessions from the State). Such an Institution will balance the funds of the provincial banks and this, in itself, would be a great gain. But the seasonal demand for credit would be as keen as before and the all-India bank will be

* *Studies in European Co-operation*, Vol. II: p. 80.

faced with the same difficulty with which the provincial banks have at present to encounter. The real solution is to be found in the method by which the joint-stock banks get more credit when there is a keen demand for currency. On such occasions these banks 'rediscount' their commercial paper at the Reserve Bank, and this makes the supply of credit elastic. We have as yet no Reserve Bank. The Imperial Bank of India is filling the place of a Reserve Bank. Nor is there any real 'rediscount' market. The power given to the Imperial Bank to rediscount *Hundis* to the amount of 12 crores of Rs. represents what rediscount market exists. We shall consider in the Part dealing with Currency and Exchange this reform of the Indian currency system. Suffice is to say here that similar facilities should be given to the Co-operative Provincial Bank. This bank, by its very nature, cannot have any commercial paper like bills of exchange. It has advanced loans on the security of promissory notes and similar documents of the Central Banks. These securities are not readily realizable. But it should be possible for the provincial bank to get these securities 'rediscounted' at the Reserve (or in its absence, the Imperial) Bank. "It would be a very great convenience to the provincial banks, if not a necessity, to find a bank of standing in the province which would discount their bills etc., for it. The advantage is that when these paper securities are accepted for rediscount by a commercial bank, it means that the provincial bank possesses in these securities not capital which is locked up for the time being in an unrealizable form, but so much liquid capital which it may use as equivalent to cash in every emergency that may arise."*

* Dr. Mathai : *Agricultural Co-operation in India* : p. 106-07.

CHAPTER X

INDUSTRIES : THEIR PRESENT POSITION AND FUTURE ORGANIZATION

(i) PROGRESS OF INDUSTRIES—Thirty-five years ago the late Justice Ranade took stock of Indian manufactures and thought that they furnished a promising beginning of industrialization *within* the country. Though the import trade had well-nigh killed our indigenous industries new ones were slowly taking their place “thanks to the efforts of the Indian people assisted to a large extent by the influx of British capital and enterprize”.* He classified the new industries as *manufacturing, planting and mining* industries. He calculated that “they represented an investment of nearly 50 crores of Rs. and afforded new and varied employment to nearly 25 lakhs of people all the year round”.†

In 1916-18 the Indian Industrial Commission reviewed the position of Indian industries and presented a picture of that position by selecting those typical areas where large-scale industry was making progress. “Prominent among these areas are the great cities of Bombay and Calcutta; up-country manufacturing towns like Cawnpore; distributing markets like Delhi; the cotton and jute tracts, where machinery and markets have been gradually called into existence to deal with important commercial

* Ranade's *Essays on Indian Economics*. 3rd Edn., p. 99.

† Ranade : p. 106.

crops; the railway workshops; and the coal and iron districts of Bengal and Bihar.”*

Let us briefly indicate the nature of the industrial development that is taking place in each of these areas. *Calcutta* has an immense natural advantage in its situation on the estuary of a mighty river system which traverses the fertile and populous plains of Bengal. It is the undisputed centre of the great jute, tea and coal industries. These industries, the busy river traffic and the large port of Calcutta have led to the establishment of engineering firms in, and in the neighbourhood of, Calcutta. There are also flour and paper mills and smaller factories for tanning, pottery, pencil making, rice-polishing, printing and the like. *Bombay's* development is due to its geographical position and its magnificent harbour opening directly on the sea (unlike Calcutta, which is 120 miles inland from the sea). But it lacks the advantage which Calcutta possesses in its proximity to the coal fields and in the river system of Bengal. The lack of water communications has been partially overcome by the construction of railways that radiate from Bombay towards the north, east and south and bring it within easy reach of the cotton-growing tracts of Gujerat and the Deccan. The lack of coal has been partially overcome by the generation of electricity in the Western Ghats and the power so produced is utilized for electrifying the suburban railways and driving the cotton mills. The Jute-industry is concentrated round about Calcutta. The principal industry of Bombay is the spinning and weaving of cotton. But the position of Bombay is not only not

* *Indian Ind. Com. Report* : p. 8.

monopolistic, but is being assailed by the rise of the cotton-industry in up-country towns like Ahmadabad, Sholapur, Nagpur, Delhi and Cawnpore. Another important difference between Bombay and Calcutta is that a large share is taken by Indians in the trade and industry of Bombay whereas European domination is more or less complete at Calcutta. Like Calcutta, Bombay has its complement of workshops, flour mills, tanneries, silk factories and the like. *Cawnpore* is an important up-country industrial centre. At first Government established a few factories for the supply of ordnance, saddlery, boots, etc. for military purposes. Then European enterprise successfully started a variety of industries in cotton, wool, leather, etc. There are also sugar-factories, brush-factories, chemical works and the like. *Delhi*, in addition to being a commercial centre, has a few spinning and weaving factories, flour and biscuit factories, and oil mills.

The operation of Indian railways has called into existence many *workshops* for the repair of locomotives and the construction of carriages. They represent an important form of industrial development. They are to be found in such convenient railway-junctions as Lahore, Jamalpur, Zansi, Bombay and Hubli. Then there are the Government *ordnance factories*, producing high-class munitions of war and employing several thousand workers. They are situated at Cossipore, Ishapur, Dumdum, Kirkee and Jubbulpore. In the *cotton tract* are scattered numerous gins and presses for preparing cotton for export and a few spinning and weaving factories. Finally, we have the *coal-fields of Bengal and Bihar*. They include the principal coal-producing areas, *viz.* Raniganj, Jharia and Giridh. In close connection with the Bengal coal-fields are the

iron and steel works at Kulti and Jamshedpur. A word must be said about the industrial position of *Burma*. It is the chief rice-growing tract of India and has immense forest and mineral resources. "Among the organized industries of Burma are paddy milling, the timber trade, the extraction and refining of mineral oil, and various other mineral ventures, the most important of which in their ultimate bearing on the industrial development of India generally, are the winning and treatment of lead, silver and zinc ores of the Baldwin mine in the Northern Shan States, and the wolfram and tin mining of Southern Burma. The preparation of rice, timber and oil for export and consumption mainly centres round Rangoon which is the capital and main port of Burma and is conveniently situated for the receipt of produce from the railway and the Irrawaddy river alike."*

We may present a *statistical* picture of Indian industries by summarising the results of the Industrial Census that was taken in 1921. They are given in the appendix. For the purposes of this Census a factory meant an establishment where more than 20 persons were employed. Their total number was 15,606 for the whole country, giving employment to 2,681,125 persons (1,994,314 males, and 686,811 females). In another table are given the value and quantity of the minerals raised from Indian mines in 1924-1925. Finally, the *financial* basis of the industries can be gathered from two more tables given in the appendix showing the joint-stock companies operating in India. In the year 1924-25

* *Ind. Ind. Com. Report*: pp. 31-32.

such companies, registered and working in British India, were 4821, with a paid-up capital of 266 crores of Rs.; those registered and operating in Indian States were 384, with a paid-up capital of 10 crores of Rs. The number of companies that were registered *outside* India but working in India was 786 with a paid-up capital of £ 648 millions.

(2) ANALYSIS OF THE INDUSTRIAL POSITION—We may now proceed to analyse this industrial development. (1) First of all, what is the *position of Indians* in the industries? With regard to *ownership*, the Indian Census Report (1921) summarises the position thus: * “European companies own the majority of the tea gardens of Assam and Bengal, but Indian enterprise is growing in regard to the private ventures. Indigo in Bihar and Orissa, Coffee in Madras, Rubber in Travancore are mostly in European hands, but the coffee plantations of Mysore are largely owned by Indians. Most of the large collieries of Bengal are held by European companies, but 65 out of 73 private concerns belong to Indians. The cotton industry of Western India is almost entirely Indian; while the jute mills of Bengal are in European hands, though the small presses are mostly owned by Indians. The rice and flour mills, and the brick and tile factories, with the exception of a few large concerns, are in the hands of Indians”.

Control and management follow ownership. In not a few cases concerns owned by Indians are managed by Europeans. Cases, where the ownership is European but management Indian, are rare and exceptional. The unskilled labour force, subordinate

* *Indian Census Report* (1921): pp. 266-67.

supervision and the clerical staff are composed of Indians. The backwardness of Indians in industries is seen from the fact that out of 910 patents sealed in 1924, only 96 belonged to Indians, 155 to non-Indians residing in India and 764 to outsiders. Similarly, in copyrights for designs, out of 1612 applications only 29 belonged to Indians, 15 to others residing in India, and as many as 1568 to outsiders.*

(2) We have seen before (pages 75-77) that the development has been *unstable*. The foundational industries of iron and steel and of chemicals are of recent growth or are even now non-existent.

(3) It has been also said that the present economic development of the country has 'failed to preserve a healthy equipoise.'† Some industries, *e.g.* steel and cement are suffering from 'over-production' and are being kept alive by artificial expedients, and others, *e.g.* sugar-production, are being starved. But such difficulties are bound to arise in the initial stages. The 'over-production' of steel or cement is a temporary phase and with the general progress of industries the demand for steel, cement and the like would increase.

We may therefore endorse the conclusion of the Indian Industrial Commission : "The industrial system is unevenly, and in most cases, inadequately developed; and the capitalists of the country, with a few notable exceptions, have till now left to other nations the work and the profit of manufacturing her valuable raw materials, or have allowed them to remain unutilized".‡

* *Statistical Abstract*. (Fourth Issue) : pp. 634-35.

† *India in 1925-26* : p. 317.

‡ *Industrial Com. Rep.* : p. 290.

(3) DEMAND FOR INDUSTRIALIZATION—Hence the demand of patriotic Indians since the days of Ranade and Dutt for a comprehensive policy of industrialization. It has been alleged that the cry for industrialization comes chiefly from the educated classes which, on account of the increasing difficulty of getting service and the over-crowding of the professions, look up to Government to provide additional employment to them by establishing industries within the country. It is also said that the cry is partly political, for Indians do not like that their country should be dependent upon others in industrial matters. Those who are sceptical about the industrial future of India* suggest that the country should devote itself exclusively to agriculture for which it has got special natural facilities and a skill inherited from generations; they hold that any labour or capital that is diverted from agriculture for the establishment of industries represents a diminution rather than an increase of wealth; that a better organization of agriculture and the application of science to it afford unlimited scope for development; that the world's demand for the raw materials of industry is likely to increase than decrease and, therefore, better prices will be obtained for the exports of agricultural products; and finally, that it would be cheaper in the long run to buy from abroad the requisite manufactures than to attempt to prepare them within the country.

Now we have already pressed for the development of Indian agriculture. In my opinion, there is no necessary antagonism between agriculture and indus-

* Cf. Ch. II. Agriculture *v/s* Industries of my *Economics of Agricultural Progress*.

tries, so that we *must* neglect one or the other. I hold that it is just the other way. Development of industries is necessary *even in the interest of agriculture itself*. Industries provide the real market for the raw materials furnished by agriculture, and, secondly, an industrial population gives rise to a great demand for a variety of food-grains and other agricultural products for direct consumption. I have not the least doubt in my mind that Indian agriculture will prosper *pari passu* with the development of our Industries and with the resulting increase in the productivity and "purchasing power" of the Indian masses.

Nor is it correct to say that industrial development will cause an undesirable diversion of labour and capital from agriculture. So far as *capital* is concerned, the capital for industries comes mostly from the urban classes. It has also been pointed out that what capital exists in rural areas is devoted to the purchase of land rather than to its improvement. And as for the diversion of *labour*, it is in every way desirable, for we have already seen that at present too many are crowding upon land.

Again, the inherent limitations on Indian agriculture are not properly realized when an exclusive dependence upon it is advocated. (a) The Montagu-Chelmsford Report points to one drawback when it says,* "The economics of a country which depends to so great an extent as India upon agriculture must be *unstable*". The precarious and scanty rainfall over a greater part of the country makes Indian agriculture the *more* unstable. (b) It is well known that agriculture follows the Law of Diminishing Productivity. In the

* *Montagu-Chelmsford Report* : p. 332.

manufacturing industries this law comes into operation at a very late stage.

But we press for industrial development not on *negative* grounds (such as have been just now examined) but on certain *positive* considerations. Two factors are necessary for industrial development : a large and efficient labour supply, and abundance of raw material. I shall say something about Indian labour in the next chapter. Here I shall say a few words about the natural resources of India. Some idea of its *Agricultural* wealth has been already given. Consider next the *Forest wealth* of the country.* The area under forests in British India is some 250,000 sq. miles. Their national importance needs no stressing. They induce more rainfall, regulate surface drainage of water, check erosion and help increase sub-soil water. As reservoirs of fodder and grass they are indispensable to the cultivator who also depends upon them for other minor requisites. They afford permanent or temporary employment to thousands. They supply timber and fuel to a vast population. From the industrial point of view, the forests yield many minor products that are the raw materials of industry. Thus the extraction of resin and turpentine, the preparation of pulp for the manufacture of paper, collection of tanning substances like myrabolams, distillation of various oils, the collection of lac, shellac, *cutch* and *katha*,—all these represent important forest industries and are capable of great improvement. Nor is the financial aspect of forests negligible. The annual gross cash revenue from forests was 37 lakhs in 1864-69 and 375 lakhs in 1914-1919. The *net*

* Cf. E. A. Smythies' *India's Forest Wealth*.

profits for the corresponding periods were 12 and 160 lakhs respectively. The profits can be increased tenfold or even twentyfold if the forests were properly utilized. This can be done by (a) better attention to new plantations and improvement of existing stock, (b) improved means of communication to reach the inaccessible parts of forests and the adoption of scientific methods for the extraction of timber and fuel, (c) research for the preservation of timber and finding out new uses for them and finally, (d) research in the industrial possibilities of the minor products of the forests.

Consider next the development of *Fisheries*. The Indian Industrial Commission was satisfied that an immense future awaits a more active development of Indian fisheries. Departments of Fisheries exist only in two provinces of India. Much has to be done in improving the methods of catching fish in the deep sea and on the coast, and of drying, curing, preserving and canning fish, and of preparing fish oil and manure. Then there is the field for improving the quality and quantity of fresh water fish in tanks, rivers and canals.

Some idea has been given before of the *Mineral wealth* of India. Reference may be made to Sir T. H. Holland's *A Sketch of the Mineral Resources of India* (1908), or to Mr. J. Coggin Brown's *India's Mineral Wealth*. The annual value of that wealth is fifty crores of Rs.

The *Power Resources* of the country were carefully examined by the Indian Industrial Commission (Ch. VI of the Report). The motive power for industries is derived from coal and wood, liquid fuel like oil and alcohol, wind and water power. The distribution of

Indian coal-fields is not satisfactory, and the quality of the coal also is said to be poor. But the limit has not yet been reached and there is no cause for alarm. The use of wood as a source of power for industrial purposes is costly and has limited possibilities. The oil resources of Burma are being exhausted and other sources are not in sight. But liquid fuel in the form of alcohol can be got in any quantities from the distillation of the *mowra* flower which grows extensively in the forests of India. Wind-power cannot be used on any large-scale. We lastly come to the utilization of water power. For this purpose storage-works are necessary to conserve the rain water. The earliest attempt in this direction was the construction of a dam on the Cauvery at Shivasamudram in 1903. The electric power there generated is partly utilized for working the Kolar gold mines. We have already seen how the electric power generated in the Western Ghats is solving the problem of providing cheap motive power to the mills and suburban railways of Bombay. The whole of Burma, and the whole of North India along the Himalayan range possess enormous resources for generating electric power. European countries have made the fullest use of this natural advantage of falling water. Germany and Switzerland have developed 75 *p. c.* of such resources and France and Norway about 30 *p. c.* India has utilized only 0.55 *p. c.**

So far, therefore, as material resources are concerned, I do not know what country, if not India, can make a better claim for industrialization. Other positive advantages of industrial development can

* Dr. Rajanikant Das : *Production in India* : p. 37.

be summarised in the words of the Indian Fiscal Commission. (a) Industries will increase the productive wealth and enrich the country generally. (b) They will help to redress our present excessive dependence upon agriculture. (c) Apart from the question whether the profits from industries or the profits from agriculture are greater, it may be safely asserted that the profits of industries are more likely to go to the creation of fresh capital than the scattered profits of agriculture. (d) Industries will provide additional employment to labour. (e) They will increase the real wages of labourers by supplementing the income of their families some members from which migrate to the town for work, and by directly raising the rate of wages of agricultural labourers by diverting a part of the local labour supply to the town. (f) Again, so far as industrial development increases the national wealth, it will, of course, increase the taxable resources of the country and bring increased revenue to the State. It also produces wealth in a form in which it is likely to yield a relatively high revenue. Agricultural wealth is taxable only through land revenue which expands slowly. The profits of industries, on the other hand, are taxed mainly through the income-tax, and also, after distribution to individuals, contribute largely to the customs, and both these are sources of revenue which respond immediately to increased wealth. (g) An important result of industrial development cannot be measured in terms of money. A country industrially undeveloped tends to suffer from a certain intellectual deadness. The outlets for diversity of talents are few. Those who might have shone in a wider sphere have their energies and ambitions cramped in the mould of uniformity. It is hardly too

much to say that a certain measure of industrial life and opportunity is an essential condition for building up a vigorous national character. And with regard to India, the effect on national character is likely to be particularly marked and particularly beneficial. It has long been felt that education in India has not been producing a type of mind with a sufficiently practical grasp of affairs, and industrial training is calculated to provide the corrective required.”*

For our present backwardness in industries nobody is more responsible than Government. For years it adopted a *laissez faire* attitude towards this question. Beyond collecting commercial intelligence of a sort, and providing rudimentary technical education in a few institutions it did little. When two provincial Governments, *e.g.* those of the United Provinces and Madras, adopted a more active policy in starting industries, cold water was thrown on their ardour by the warning of the then Secretary of State, Lord Morley. He said “that the results of the attempts to create new industries were not of a character to remove his doubts as to the utility of State effort in this direction, unless it were strictly limited to industrial instruction and avoided the semblance of a commercial venture.”† But the Great War proved an eye-opener to Government. The industrial backwardness of the country proved a handicap to the efficient mobilization of the resources for the prosecution of the War. Government realized that an industrial India was a source of strength to the Empire, and hence the

* *Of. Indian Fiscal Commission Majority Report* : Paras 42-50.

† *Of. Chapter VIII of the Indian Ind. Commission Report for the attitude of Government.*

appointment of the Indian Industrial Commission and, later on, of the Indian Fiscal Commission. The larger considerations for the adoption of an Industrial Policy for India were thus forcibly put by the Montagu-Chelmsford Report.* "Imperial interests also demand that the natural resources of India should henceforth be better utilized. We cannot measure the access of strength which an industrialized India will bring to the power of the Empire; but we are sure it will be welcome after the War." In a world-wide war India is made the base of operations in the Eastern theatre. "Nowadays the products of an industrially developed community coincide so nearly in kind though not in quantity with the catalogue of munitions of war that the development of India's natural resources becomes a matter of almost military necessity." The Montagu-Chelmsford Report, therefore, recommended a forward policy in industries, as in politics. "It has been left for the War to bring out fully the need for advance in the industrial sphere as in the sphere of politics. But in any case we can see no reason for hesitating to move forward boldly in a matter in respect of which considerations of military security, political expediency and economic advantage are coincident, and are in agreement also with the interests of the Empire as a whole."†

(4) FACTORIES, WORKSHOPS OR COTTAGE INDUSTRIES—The demand of patriotic Indians for an active industrial policy is not thus based upon selfishness or on sentimental politics, but upon solid economic reasoning. But when we further reflect upon the

* *Montagu-Chelmsford Report* : para 337.

† *Montagu-Chelmsford Report* : para 340.

nature of the industrial policy that is suitable to our country we encounter another debated point : as to whether we should go in for large-scale industry or for the revival and adaptation of our cottage industries to modern conditions. In other words, shall we have factories or workshops or cottage-industries? Some writers, e.g. Prof. Radhakamal Mukerjee,* think that Western industrialism is neither *possible* nor *desirable* for us. It is not possible because the requisite conditions, e.g. competition, concentration of capital, science, industrial leadership are more or less absent in our country. Our institutions like the caste and the joint family are inconsistent with the industrialism of the West. Nor is such industrialism *desirable* for its experience in the West has not been an unmixed blessing. These writers, therefore, maintain that cottage industries are peculiarly adapted to our physical environment and to our social institutions. A similar view is held by Sir Alfred Chatterton.† He says "that the revivification of ancient industrial organization is of much greater moment than the establishment of a modern factory system."‡ Sir Alfred goes so far as to maintain that even if factories were established behind the walls of Protection they would be soon conquered by Europeans. "There is no fund of capital seeking remunerative investment. Industrial leaders with technical skill and business experience are non-existent, and the operative labour could only be obtained with difficulty and would require training from the beginning. You might exclude British manufactures, but you cannot exclude

* Cf. His *Foundations of Indian Economics*.

† Cf. His *Industrial Evolution in India*.

‡ Sir A. Chatterton : page 47.

the British manufacturer. A protective tariff would compel him to start in India, and stimulated by the inflated prices which he would be able to obtain within the protected zone, there can be but little doubt that with his energy and business experience he would overcome the initial difficulties due to lack of local knowledge. Managers, foremen and workmen would be sent out to India, native labour would be trained, and mills, workshops and factories set going. All posts of responsibility would be in European hands. India would have an industrial system but it would be no source of profit to her and it would not certainly furnish the educated classes with occupations of a superior character the need of which has led them to cry out for industrial development."*

The danger to which Sir Alfred refers is not imaginary. We are little better than the beasts of burden of what large-scale industries came into existence in the country under the Free Trade regime. Protection would simply add to our burden. The profits would go elsewhere unless we are on our guard. We certainly don't want Protection that British labour, capital and enterprise should develop the natural resources of the country. Thus on the one hand Industrialism has led to a series of grave social problems in the West; its prospective growth in India, on the other, is more likely to redound to the profit of Europeans than to that of Indians. Hence, as the Earl of Ronaldshay says,† "Industrialism would meet with the opposition of two sections of Indians: that of the section of Indian public men

* Chatterton : *Evolution of Industry in India* : p. 54.

† Earl of Ronaldshay : *India—a bird's eye view* : p. 180.

which appreciates the advantage of industrial development, but is jealous of outside aid; and that of the idealists, who view with intense dislike the whole system of industrialism which they regard as one of the worst products of the Materialism of the West."

But are these dangers unavoidable? The defects of the Factory system can be removed by improving housing conditions in the towns, by labour legislation and by the organization of labour. The danger of foreign exploitation can be minimised by due restrictions upon the use of 'external' capital in the country and by a vigilant policy of Protection. With such precautions I do not see any harm in the establishment of large-scale industries in India where conditions are favourable. The Western methods of production are undoubtedly more efficient and we must adopt them wherever possible. Sir Theodore Morison rightly says,* "From its inherent superiority the modern organization must prevail over the old as certainly as a well-drilled, well-equipped and well-officered army must prevail over a mob of peasantry armed only with scythes and pitchforks."

But the Factory has not altogether displaced the workshop or the cottage industries even in the West. The workshop is a distinct feature in the industrial organization of the European countries. Thus in England, in the tailoring and boot-making industries in London, in the cutlery industry at Sheffield, in the lace and hosiery industry at Nottingham the workshop is holding its own against the factory. Again, in each town workshops have become a necessity for

* Cf. His *Economic Transition in India* : p. 151.

mechanical repairs of all descriptions. Many new industries again first of all assume the workshop stage and later on reach the proportions of factory-production. In one form or another, therefore, workshops are a necessary and important adjunct of modern industry.

In our larger towns workshops are becoming quite a prominent feature. Some of our old cottage industries, *e. g.* hand-loom weaving, metalware, oil-pressing have passed on to this stage. This form of industry is peculiarly suitable to a people who has small amounts of capital, limited technical knowledge, and only a modicum of business organization. Workshops have also come into existence in connection with repairs to agricultural and mechanical implements, motor traffic, and vehicular traffic of the old type. If the workshop has not been eliminated from the West, it cannot be from India which is a country of small producers. Workshops decentralize employment. They will play a vital part in the organization of our labour resources, for it is obvious that the growth of factories in the country even on the most ambitious scale can provide employment only to a *fraction* of our vast population.

Cottage-industries must be organized for that considerable proportion of our population which factories or the workshops cannot absorb. Some of our cottage industries, *e. g.* weaving, artistic work of various kinds, pottery and the like have survived the competition of cheap imports. We will improve the chances of their survival, and probably give them a vigorous life by proper organization. Most of these industries suffer on account of common defects. "In every case we notice that the cardinal features of the

situation are first, imperfect division of labour, secondly, bad financial conditions, thirdly, the absence of commercial organizations to place the output on the market, and over and above all, the artisan's inherent conservatism and lack of ambition and present inability to appreciate a higher standard of living."*

Industrial development has become a transferred subject since the Reforms. The provincial Departments of Industries are paying attention to the preservation and improvement of cottage industries, and to the starting of industries on a small scale. Thus in Bengal attention is being paid to the weaving and tanning industries. In Bombay and Madras attention is being paid to the handloom industry. In the Punjab a Government tannery has been opened near Lahore. Match factories have been started at Rangoon. It will thus be seen that the provincial Departments can do a great deal to solve the problem of industrial organization.

The revivification of our deserving cottage-industries is thus a vast problem. In some industries, *e.g.* hand-loom weaving technical improvements in the implements used are desirable; in others we must provide better raw materials; in still others we must place before the artisans better, varied and more attractive models and designs. In all better education, adequate finance and marketing facilities are wanted. The co-operative movement can do a great deal for the artisans, as it is doing for the agriculturists. The cottage-industries will not only solve the problem of providing employment to the artisan class, but also

* Dr. P. Pillai : *Economic Conditions in India* : pp. 151-52.

of providing *subsidiary* occupations to that enormous population that is now struggling upon land. Those whose holdings are too small must resort to some cottage industry if they want to improve their standard of living.

Thus we want *both* agriculture and industries; and under industries we want factories as well as workshops, and we cannot afford to neglect our cottage industries. Our economic salvation lies in a proper co-ordination of these different *forms* of employment.

CHAPTER XI

INDIAN LABOUR—ITS ENVIRONMENT, EFFICIENCY AND WELFARE

(A) ENVIRONMENT

(1) SOURCES OF LABOUR—Reference has been made to the rise of organized industries in India in connection with manufactures, plantations and mines. These industries called into existence a 'wage-earning' class in the country. With the break-up of the village economy a large population—consisting of the menial servants in the villages, of the artisans who had lost their occupations and of cultivators who had lost their lands or whose holdings were very small—was set adrift from its ancient moorings. What it wanted was some kind of employment. Some migrated to the towns; others were absorbed by the construction of Public Works; a small stream emigrated to Ceylon, the Straits Settlement, Mauritius, Natal, Fiji island and the West Indies to work in English plantations. The lot of all was miserable.

In view of the divers sources from which the workers were derived and the widely different conditions under which they were employed we cannot make any generalizations with regard to 'Indian' labour. The labour problems of the cotton mills in Bombay are different from those of the jute industry in Calcutta; the recruitment of labour for tea gardens in Assam presents difficulties that are different from those encountered in procuring and

maintaining the labour supply on the coal and iron mines in Bihar and Orissa. The difficulties of Indians that emigrate to Crown Colonies form a class by themselves.

Let us briefly describe the labour conditions in the jute and cotton mills, on the tea gardens and on the coal mines. Regarding labour in the *jute mills* the Indian Industrial Commission point out* how the labourers are recruited from distant provinces by a class of men known as *sardars*. The labourers live in what are known as *busties*—collections of huts in the neighbourhood of the mills. The surroundings are usually insanitary and unpleasant. The worker does not respond to the stimulus of a higher wage because “the long hours passed in the uncongenial, if not unhealthy, surroundings of a factory, from which the labourer returns at night to a dirty, crowded and insanitary hovel where his only relaxations are found in the liquor shop and the bazaar, are most unattractive to a man accustomed to a rural life, and it is only the congestion existing in his native district and the desire to earn higher wages for a time that lead him to submit to such conditions.” The workers in the *cotton mills* of Bombay are recruited from less remote districts than those in Calcutta. They come from the district of Ratnagiri in Konkan and Poona and Satara. They are more skilful and intelligent than the immigrants into Calcutta and receive higher wages. But housing conditions are worse in Bombay and the workers live in big tenements known as *chawls*. They are recruited and employed through a class of men known as jobbers. With regard to labour on the

* *Ind. Industrial Com. Report* : pp. 11-12.

tea gardens and in the coal-mines Mr. Broughton* points out that it is recruited from the primitive aboriginal tribes while factory employment attracts men from the agricultural and labouring castes. The conditions of labour on the tea gardens were for years most unsatisfactory and though they have slightly improved, they formed the subject of the Assam Labour Enquiry Committee (1921-1922). Work in the gardens is more akin to agriculture and affords more employment to women. The labour on the *coal-mines* is partly derived from neighbouring villages and partly from the more distant areas of Chhota Nagpur. The labour supply is insufficient and intermittent. It is liable to be seriously affected by a good harvest or by an outbreak of epidemic disease to some forms of which the coal-fields have in the past been liable. Only a small proportion of the workers, except in the case of one or two established concerns, reside permanently at the mines. The condition of labourers on the coal-fields formed the subject of an enquiry by the Committee on the Housing of Labour in Bihar and Orissa (1917). The crux of the problem lies in the provision of cheap but attractive suitable housing accommodation to ensure a more stable and permanent labour supply.

(2) CONTRAST BETWEEN THE ENVIRONMENTS—Confining ourselves for the moment to 'factory' labour we must first of all appreciate the great contrast between the environment from which the worker is drawn and the environment under which he *lives* and *labours*. He comes from the village where he has been brought up in the atmosphere of the joint family and

* Mr. Broughton : *Labour in Indian Industry* : p. 144.

the caste. Probably he owns some land in the village. He is illiterate. He has his caste-prejudices. When such a worker leaves his native village he finds himself in a different world altogether when he seeks for employment in a town. He is as uncomfortable there as a fish out of water. No wonder. The unsophisticated peasant is presented with the worst phase of town life. He has to live in the dirtiest part of the town, in overcrowded tenements where family life is either impossible or a huge farce. If he finds the conditions of living in the town so repulsive he finds the conditions of work in a factory novel and, therefore, irksome and disagreeable. There cannot be a greater contrast between labour on the field where it is extensive and desultory and that in the factory where it has to be intensive and continuous.* The factory system depends for its success upon the right co-ordination of men and machinery, and labourers in a factory, therefore, have to work under strict supervision and discipline. Moreover the work is monotonous. The atmosphere is heated and stuffy and the whir of the machinery is everywhere. To make matters worse, inattention or irregularity, insubordination or breach of discipline is visited with fines.

(3) ITS RESULTS—Certain 'characteristics' of 'Indian' labour follow from this fundamental contrast between life and labour in a town and life and labour in a village. (1) First, is the *tardiness* of the worker in beginning work. The worker has become more regular as the factories cannot now begin work before 5-30 A. M. (2) More serious is his habit of '*loitering*' in the mill. He would leave his place of work as often

* Dr. B. K. Das : *Factory Labour in India* : p. 25.

and remain outside as long as he can. In many mills a system of passes has been introduced to check this evil. This habit of shirking work is partly the result of the stuffy atmosphere within the factory and partly also of long hours that were formerly common in the mills. As the Indian Factory Labour Commission of 1907 remark: "The Indian operative, while naturally disposed to take work easily, possesses considerable adaptability and that the length of the day determines to some extent the manner in which he works. Where the hours are short and supervision is good, the operative can be trained to adopt fairly regular and steady habits of work." This habit entails a great deal of 'Supervision' and adds to the cost of production. (3) Even a more serious defect is the proneness of the worker to remain *absent from the factory* for two or three days in a month in addition to the usual days of rest. This irregularity was more common in days when neither the number of hours per day nor the number of days per week for which a man had to work were defined by law. Frequent absence without notice makes the worker liable to fines which seriously diminish his pay, and also inflicts losses upon the employer. (4) Finally, there is the *migratory* habit of Indian labour. The worker would return to his native village as often as he can. His annual or periodic visit to the village is often a necessity and is not an unmixed evil. He has left his family in the village and he has to attend to other domestic affairs. Then celebration of marriages, caste and village festivities, annual visits to temples and shrines furnish other irresistible temptations. Then there are his fields in the village for work on which he must return. The worker, as

previously noted, is a villager and a peasant and looks upon factory work as a means of augmenting his income. Nor is such visit to the village without its value. As Mr. Broughton says,* "Return to the health-giving occupation of agriculture doubtless helps to keep the labour force in a state of greater physical efficiency than would be the case if factory work was the sole occupation." Again, what I may call the *amphibious* nature of Indian labour becomes an advantage in times of distress. In the West where a huge industrial population has grown up divorced from land, unemployment means starvation. In India only a fraction of the population depends upon organized industries, and the divorce from land is yet not complete. In a period of industrial depression, therefore, the operatives return to the villages. The joint-family constitutes another reserve on which they fall in times of difficulty.

Though these are advantages, it cannot be gainsaid that Indian labour will not gain in efficiency so long as it remains migratory and intermittent in character. We must create a more permanent and stable labour force on which to build our industries. As Sir Stanley Reed points out:† "The result of the migratory habit of Indian labour is a low standard of technical efficiency, an absence of responsibility arising from treatment of factory work as a disagreeable necessity only to be practised long enough to enable the worker to earn enough to return to his

* Broughton : *Labour in Indian Industry* : p. 110.

† In his Introduction to Prof. Burnett-Hurst's *Labour and Housing in Bombay*.

village, and a social disruption separating the worker from his home and family for long periods." Sir Stanley points out two other evils resulting from the same habit. "(1) One is that higher wages are not always, nor even generally, reflected in the betterment of the recipient; they are too often lost in increased absenteeism. (2) The other is the existence of a large parasite class preying on the worker. Heavy toll is taken of his wages by the money-lender, the jobber or labour supplier, the foreman and the liquor-seller, with more recently, the 'bucket-shop' keeper. At almost every stage the wage-earner is mulcted of some fraction of his wage. This leads to the conclusion that the immediate problem of Indian industry is not so much the raising of wages, for there are many signs that the industry cannot bear higher charges, as the extraction of higher service for the wages paid and securing to the worker a better return for the wages which he is supposed to receive." The Indian worker must cease to be *a truant in the factory and a vagrant in the town*. At any rate a *substantial* proportion of workers must become *permanent* town-dwellers and *pacca* factory-workers. Then only would the workers, the factories and the towns improve.

The Indian Industrial Commission refer to the same defect of intermittent labour when they complain* about the low standard of living of the worker. "The Indian workman, speaking generally, takes advantage of the greater earning power given to him by increased wages to do less work, and shows no desire to earn more money by working more regularly or improving his own efficiency."

* *Ind. Ind. Com. Report* : p. 179.

The Indian worker is migratory in another sense. He would not stick to one factory, but would wander from one factory to another. The slightest cause is apparently sufficient to determine him to leave one employer for another. This constant change in the *personnel* of the labour force strikes at the root of efficiency. No discipline is possible on the part of the worker, no harmonious relations can develop between him and his employer so long as the worker is a rolling stone. The employer also has to suffer a great deal in employing and discharging a far larger number of workmen than the average number in his factory. The evil of an excessive 'turn-over' in workmen is great and must be checked by teaching the workman to be more steady and the employer to be more humane.

(B) EFFICIENCY

(4) PARADOX OF INDIAN LABOUR—The foregoing analysis will throw some light upon that paradox of Indian labour to which the Fiscal Commission refers in its report.* There is a complaint about the scarcity of Indian labour when as a matter of fact there is superfluity of labour in the villages. The industrialists complain that there are not enough men for jobs that are waiting for them. The politicians complain that there are not enough jobs for men that would fain have them. There is an element of truth in both these views if they are properly understood. The *scarcity* of labour is experienced because labour is so *migratory, intermittent and inefficient*. There is a *superfluity* of labour when regard is had to the paucity of industries in the country. The essence of industrial

* *Ind. Fiscal Com. Report* : p. 25.

organization consists in providing *sufficient* jobs to men and in finding *efficient* men for the jobs. It is because such an adjustment does not exist in India that we hear complaints about the *insufficiency* and *inefficiency* of Indian labour.

The fundamental problem before the country is how to increase the efficiency of labour. Efficiency is the corner-stone of success in modern methods of production.* It is of two kinds : efficiency of management and efficiency of labour. Efficient management consists in the installation of the right kind of machinery, in the adoption of up-to-date technical processes, in the use of the right quantity and quality of raw material and in the provision of congenial working conditions to the labour force. It also consists in the willingness and ability to pay a remuneration to the labour force that will make it work with enthusiasm for the management. In the West 'Business Organization' and 'Scientific Management' have become regular subjects of instruction in the colleges and universities. We have not as yet paid any attention to this subject which need not be further pursued here.

(5) EFFICIENCY OF LABOUR—Turning to the efficiency of labour with which we are more immediately concerned here, it is obvious that in the first place it depends upon proper nourishment and freedom from disease. The diet of the Indian worker is of the poorest quality. The diet need not be expensive but it must be nourishing. Then the habits and surroundings of the worker make him a constant victim to many diseases. It has been conclusively shown that

* Cf. Dr. R. K. Das : *Factory Labour in India*, Ch. VI.

a great deal of the inefficiency of the Indian worker is due to diseases that are of a preventible nature, *e.g.* malaria and hookworm. An improvement in sanitation and public health is bound to contribute to the efficiency of labour. But efficiency depends not only upon a sound body but upon the development of certain mental and moral qualities, *e.g.* an aptitude for work that is assigned, an adaptability to industrial surroundings, steady application to work. Again, precision and accuracy are essential elements in efficiency. They make for *better quality* of work. Equally important are speed and dexterity which make for *quantity*. Both can be acquired by practice. Finally, there are the elements of skill and ingenuity which are more or less *native* qualities.

It is clear that efficiency of labour is a plant of slow growth. In the previous section we have analysed the causes of inefficiency. We may thus summarise them in the words of Dr. R. K. Das.* “(1) there is no social background in India for the development of industrial efficiency. Traditions, customs and the standard of living do not move the Indian worker to ‘shine’ in some industrial line as a means of social recognition to the same extent as they do in Europe and America. (2) As a class, labourers in India are illiterate, and have no knowledge of things in general and technical processes in particular, which forms the foundation of efficient work. (3) Neither at home nor in any other institution have they any chance of receiving training in those qualities such as application and steadiness, which are the first requisites for acquiring efficiency in organized industry. (4) There is no such class

* *Factory Labour in India* : pp. 126-27.

exclusively devoted to factory work except in a few trades. Thus lacking in specialization they also lack in efficiency." Dr. Das also adds that the inefficiency is (5) the result of lack of efficiency of management, (6) the result of the factory system being comparatively new in India, people having as yet not adapted themselves to this system of production and not developed aptitude and energy in the new technique and (7) the result of factory labour being mostly rural.

But there is no ground for pessimism. When the labour force is *stabilized*, the first and most difficult step will have been taken. Next must come education, general and special. Conditions of living and of labour must also be improved. Efficiency will follow in the wake of these reforms.

Comparative Efficiency—Frequent comparisons are made between the efficiency of labour of different countries. For instance, it is said that a single English operative in a Lancashire mill will do as much work as is done by three Indian operatives in a Bombay factory. Elaborate tables have been prepared to show the comparative efficiency in different departments of a particular industry, *e.g.* Cotton Spinning and Weaving or in different industries. Such comparisons are useful but we must be careful in employing them for practical purposes and realize the limitations from which they suffer. First is the extreme difficulty of making such comparisons. "The efficiency of the labourer depends upon a number of fundamental conditions within the industrial organization, conditions which differ in different countries and even in individual mills in the same country to such a degree that comparison is exceedingly difficult."* The

* Dr. R. K. Das : *Factory Labour in India* : p. 119.

efficiency of labour depends upon the *equipment* and *environment*. The machinery in Indian mills is not up-to-date nor are the technical processes. The equipment of the factory with labour-saving devices is far from perfect in India. The raw material supplied may be inferior. Again climatic conditions differ. Then there are differences in physical strength, powers of endurance and the like. All these point to caution in the use of statements of comparative efficiency.

(C) WELFARE

(6) INTRODUCTORY—Efforts to solve the problems of labour resulting from the capitalistic method of production have assumed three distinct forms according as they proceed from the philanthropists, the legislators and the workers themselves. The philanthropists prepared the ground for reform by propaganda work and started organizations for the relief of distress and removal of disabilities. The legislators made laws to help the workers in their struggle for better conditions of life and work. The workers organized Trade Unions with the object of resorting to 'collective bargaining' with capitalists. We shall now consider what Philanthropy, Legislation and Trade-unionism have done in India for accomplishing the welfare of labour. Often the three agencies co-operate with each other in their common object and it is only for the sake of convenience that their work will be considered separately.

(7) HISTORY OF INDIAN FACTORY LEGISLATION—We shall first of all deal with the laws made by the State in India. As in the case of agriculture, the Government of India occupies a unique position in the

field of organized industry. It is the biggest capitalist and employer of labour in the country. It is also conversant with the development of labour legislation in the West and can draw upon the accumulated experience of England in dealing with the labour problems in India.

As in the case of England the earlier stages of the factory system in India were marked by attempts on the part of employers to exploit the labour of men, women and children and some kind of factory legislation became necessary. It will not serve any useful purpose to go into the details of the history of factory legislation in India. It has been lucidly given by Mr. A. G. Clow, M.A., I.C.S.,* and by Dr. R. K. Das.† The incentive to such legislation was mainly furnished by the fear of the Manchester Cotton Manufacturers at the growing industries of Bombay. They made repeated representations to the Secretary of State for India to apply the factory legislation in England *en bloc* to the nascent industries in India to eliminate what they regarded as 'unfair' competition between Lancashire and Bombay resulting from the employment by Indian manufacturers of low-paid labour of men, women, and children for long hours in insanitary factories. Along with factory legislation they also pressed for the reduction or removal of the import duty on British cotton goods and later on for the imposition of a corresponding excise duty on cotton-goods manufactured in India. The history of the English agitation for factory legislation in India should be read in conjunction with the history of the

* *Indian Factory Legislation : A Historical Survey*, by A. G. Clow.

† *Factory Legislation in India*, by Dr. R. K. Das.

bitter controversy that raged round the cotton duties. The conditions of factory work in India were probably bad enough, but the Factory Commission of 1875 were divided on the question as to whether any legislation was needed, and it was the pressure from the Secretary of State who, in his turn, was egged on by the Manchester interests, that made the Government of India pass the first Factory Act of 1881. It was openly said that this legislation "had been introduced in consequence of agitation by ignorant English philanthropists and grasping English manufacturers,"* and even the Viceroy in concluding the final stage of the Bill had to say: "I should be extremely grieved if any notion got abroad that the Government of India were in the least degree influenced by a mere desire to meet any wish, if such wish did exist, on the part of manufacturers in England to place restrictions on their competitors in this country."†

This Act was applicable to 'manufacturing premises using power-driven machinery and employing 100 or more persons and working for more than four months in the year.' It regulated the labour of *children* only who could be employed between the age-limits of 7 and 12, who could not work for more than 9 hours in a day with an interval of rest for one hour, and who had to be granted four holidays in a month.

Thus the Act did *not* apply to indigo, tea and coffee plantations, or to ginning factories (which generally worked for less than four months in the year) or to the labour of women or men. It contained minor provisions about the fencing of dangerous

* A. G. Clow : p. 7.

† Page 11.

machinery, about the appointment of special factory inspectors when necessary and about the reporting of accidents.

The limited scope of the first Factory Act did not satisfy the demands of Manchester. The reports made by the factory inspectors appointed under the Act of 1881 were made the chief ground for urging further enquiry and more restrictions, particularly upon the labour of women. The Bombay Government appointed a second Factory Commission in 1884 but the Government of India did not take any action on the report of this Commission. The agitation for further factory legislation received strength from two new quarters about this time. The Indian workers were becoming vocal for the first time. They had formed a Millhands' Association, held a Conference and later on presented a petition to the Labour Commission that was finally appointed in 1890. And secondly, an International Labour Conference was held at Berlin in 1890 and as England was in general agreement with its main recommendations it was urged that they should be immediately embodied in the new Factory law that was being considered. As a matter of fact they were embodied later on, for they included a weekly day of rest, the limitation of women's hour to 11 and of children under 14 to six, the provision of an interval of $1\frac{1}{2}$ hours daily to women. Thus, as Mr. Clow observes, "for the first time, international counsels were influential in affecting the course of factory legislation in India."* On this occasion also it was freely said that legislation was being undertaken in the interests of Manchester. As

* *Indian Factory Legislation* : p. 21.

Mr. Nugent, a witness before the Commission of 1890 put it, "We should protect the Indian operative within all reasonable limits, but we should not protect out of existence him and the industry which is his livelihood, nor should the protection of the Indian millhand be converted into a device for the protection of the British manufacturer against the Indian mill-owner."*

The scope of this Act was wider as it applied to all factories employing more than 50 persons, or to those employing even 20, at the option of the Local Government. The age-limit for the employment of children was made 9 to 12 and a certification of the age was made compulsory. Their hours of labour were limited to 7 per day with half an hour's interval. For the first time the hours of labour of *women* were limited to 11 with an interval of rest of 1½ hours. All factories had to stop work for half an hour about mid-day and also a weekly day of rest was enjoined. There were further provisions for ventilation, sanitation and water-supply.

This Act also fell far short of the demands of Manchester and of the leaders of the Indian labour movement. For a time the agitation for further legislation abated as the whole textile industry of India passed through a period of depression. Plague and famine also added to the hardships of all. Since 1904, however, the textile industry showed remarkable revival. The installation of electric lights in the factories made long hours possible and the vigorous expansion of the cotton-industry in Bombay again roused the fears of Manchester. The jute-industry of Calcutta was making a similar rapid progress and

* Dr. R. K. Das : *Factory Legislation in India* : p. 80.

Dundee—the centre of jute manufactures in Scotland—made a common cause with Manchester. A Deputation waited upon Lord Morley, the Secretary of State for India, and he appointed in 1906 a preliminary committee of inquiry. It was followed by the Factory Labour Commission of 1907. The main question at issue was whether the labour of male *adults* should be *directly* regulated by law. The Commission was in favour of *indirect* regulation, for even in England *direct* regulation of male labour had not been attempted. The Government of India was in favour of *direct* regulation and it won the day.

The main provisions of the Factory Act of 1912 regarding the labour of women and children remained as before. In textile factories adult males were to work for 12 hours per day only. The working day of textile factories was confined between 5-30 A.M. to 7 P.M. The textile factories could not use mechanical or electrical power for more than 12 hours in a day. All factories were required to stop work for at least half an hour after every six hours' work.

The Great War, as Mr. Clow points out,* had important effects on factory administration and ultimately on factory law. An immediate effect was an immense increase in industrial activity; another was the difficulty of factory inspection on account of reduced staff. "The War also strengthened the position of the workers as there was an increased demand for labour. The rise in prices and profits and the general unrest which followed the War led to greater consciousness on their part of their power, and to a strong disinclination, not generally apparent

**Indian Factory Legislation* : pp. 53-54.

before, to work for long hours or to accept disagreeable conditions. For the first time in India, the desire of the operatives became a potent force in securing improved conditions and more stringent legislation."

Again, after the War, regulation of labour assumed an international aspect. International competition is so keen that no country, by itself, can afford to go in for restricting and improving the conditions of work, unless other countries also co-operate.* The Peace Conference, therefore, appointed on 31st January 1919 a Commission on the international regulation of labour. This Commission laid down a basic Convention to the effect that no universal peace was possible if it was not established on the basis of social justice and that the failure of any nation to adopt humane conditions of labour was an obstacle in the way of other nations which desired to improve the conditions in their own country.

The Commission next laid down certain general principles for the regulation of labour. They recognised "that differences of climate, habits and customs, of economic opportunity and industrial tradition make strict uniformity in the conditions of labour difficult of immediate attainment. But they hold that there are methods and principles for regulating labour conditions which all industrial communities should endeavour to apply, so far as their special circumstances will permit."

The main principles are the following: (1) The guiding principle that labour should not be regarded merely as a commodity or article of commerce.

* Cf. H. J. W. Hetherington: *International Labour Legislation* (Methuen 1920).

(2) The right of association for all lawful purposes by the employed as well as by the employers. (3) The payment to the employed of a wage adequate to maintain a reasonable standard of life as this is understood in their time and country. (4) The adoption of an eight-hours day or a forty-eight hours week as the standard to be aimed at where it has not already been attained. (5) The adoption of a weekly day of rest of at least twenty-four hours, which should include Sunday wherever practicable. (6) The abolition of child labour and the imposition of such limitations on the labour of young persons as shall permit the continuation of their education and assure their proper physical development. (7) The principle that men and women should receive equal remuneration for work of equal value. (8) The standard set by law in each country with respect to the conditions of labour should have due regard to the equitable economic treatment of all workers lawfully resident therein. (9) Each State should make provision for a system of inspection in which women should take part, in order to ensure the enforcement of laws and regulations for the protection of the employed".*

The foregoing principles and methods of labour regulation as well as the Convention were incorporated in the Treaty of Versailles. The Labour Commission also recommended the holding of an annual International Labour Conference in different parts of the world and the creation of a permanent International Labour Office at Geneva to give effect to the policy of the annual Conferences.

**Cf. The International Labour Organization ; Bulletin 4 of Indian Industries and Labour : pp. 35-36.*

The first International Labour Conference was held at Washington in October 1919. India, as a member of the League of Nations, sends her representatives to the Conferences, two representing Government, one representing the employers and one the workmen, but all nominated by the Indian Government. The International Conference lays down Conventions which the Legislatures of the different nations may or may not ratify. Legislation follows the lines laid down in such ratified Conventions or other Recommendations made by the Conference.

The Indian Factory Act of 1922 gives effect to the Conventions adopted at the Washington Conference. Its main provisions are as follows: The definition of a factory was widened to include at the option of a Local Government any establishment employing not less than 10 persons and working with or without mechanical power. The old distinction between textile and non-textile industries was abolished. The age-limits for the employment of children were made 12 to 15 and their hours of work were limited to six in any day. The most important provision was that no adult should work for more than 11 hours in a day or for more than 60 hours per week. All workers were to have a period of one hour's rest for work exceeding six hours. At the option of workers this period might be divided into two. All workers were to have a day of rest in a week, and no worker should go without a holiday for more than 10 days at a time. The employment of women and young persons under 18 in certain processes was prohibited.

The Factory Act of 1922 came in for minor amendments in 1923 and again, in 1926. Similar

regulations were extended to the mines by the Mines Act of March 1923. It prohibited the employment of children below 13 and below the ground, it restricted the hours of adult labour to 60 above the ground and to 54 below the ground; it also made it possible for the Local Governments to prohibit altogether the employment of women below the ground. But this is not practicable for the moment in view of the large number of women employed on the mines.

Workmen require protection not only against long hours and insanitary surroundings but also against accidents. A regrettable feature of modern production is the frequent occurrence of accidents. The Indian Legislature passed the Workmen's Compensation Act of 1923 for the benefit of the workmen. It is not intended to cover all workmen, but only those that are employed in hazardous occupations in organized industries. It applies to three main classes of workmen*: (1) Railway Servants, (2) Workmen specified under Schedule II of the Act, *viz.* Tramway employees, factory and mine workers, seamen, dock-labourers, building workers, linesmen, sewage workers and members of the Fire Brigade, and (3) to other workmen specially mentioned. The Act lays down the amount of compensation to be awarded according to the extent of the injuries received. The rates of compensation differ according as they apply to workmen above 15 (adults) or under 15 (minors). In the case of *fatal* accidents, the maximum compensation is 30 months' wages

* *Of. Indian Workmen's Compensation Act, 1923.* By Mr. A. G. Clow, I.C.S.

or Rs. 3,500, whichever is less, in the case of adults and Rs. 200 in the case of minors. Scales of compensation have been laid down for permanent *total* disablement, permanent *partial* disablement and *temporary* disablement. In the first two cases the maximum compensation is Rs. 3,500, and in the last case it is Rs. 30 p.m. during the period of disablement. The Act requires the Local Governments to appoint a Commissioner to administer this Act. The amount of compensation is to be deposited with him by an employer whenever an accident causing injury to the workmen occurs on his premises. The Commissioner is to examine claims for compensation and distribute the amount to those to whom it belongs.

This post-war rapidity of labour legislation makes me subscribe to the view contained in the following extract : "Few, if any, countries have done so much to comply with the provisions of the Conventions and Recommendations adopted at International Labour Conferences. Indeed in some quarters in India the opinion is held that the Indian Government has proceeded in this matter at too great a pace."*

(8) THE LABOUR MOVEMENT—We have now given a short account of what the State has done for labour by way of legislation. Let us next turn to see what the labourers have done for strengthening their own position. Dr. R. K. Das has divided† the history of the Indian Labour Movement in India into three periods according to the object of that Movement. In the *first period* (1875-1891) its object was mainly to

* *India in 1925-26* : p. 87.

† *Of. Dr. R. K. Das : The Labour Movement in India.*

regulate the labour of women and children in the factories. At first the movement was led by educated Indians, but later on a leader was supplied by the labourers themselves. The movement did little more than placing its case before the Committees and Commissions that were appointed prior to the legislation of 1881 and 1891. The first Labour Conference of the Millhands of Bombay was held in September 1884 and a Memorial was presented to the Factory Commission appointed by the Bombay Government. In October 1889 a monster petition was presented to the Government of India. In April 1890 The Bombay Millhands' Association was formed and a paper called the *Din Bandhu* (Friend of the Poor) was started. With the Factory Act of 1891 the first phase of the Labour Movement comes to a close. It was moribund in the period of depression, plague and famine that followed. After 1904 it showed signs of revival, and in 1910 the *Kamgar-Hit-Wardhak Sabha* (Workers' Welfare Association) was formed and a new weekly "*The Kamgar Samachar*" (Labour News) was started.

In the second period (1891-1917) the object was the amelioration of the condition of Indian labour *outside* India, *i.e.* in the British Crown Colonies, South Africa and Canada. In view of this wider object, the leaders of the movement were politicians and patriots like the late Mr. Gokhale, Mr. M. K. Gandhi, Mr. S. L. Pollock and Mr. C. F. Andrews. The agitation was carried on in the Legislative Councils, on the Congress platform and in the Press and as a result, the obnoxious indentured labour system was suspended in 1917 and abolished in 1922.

With the termination of the War the movement enters upon a new phase: its object becomes narrower,

but more strictly economic, and as a result there is a strong tendency towards unionism. Four kinds of unions should be distinguished. "A *craft or trade* union is the organization of workers in a *single occupation*. A *crafts or trades* union is the *federation* of unions in different occupations. An *industrial* union is an organization of the workers in the *same industry*. A *labour* union is an organization of workers *irrespective of occupations*."* Thus spinners' and weavers' unions are Trade Unions in the strict sense. Then a union like the Bombay Central Labour Board or the All-India Trade Union Congress is a Trades Union. A railwaymen's union or a printers' union is an Industrial Union, and a union like the Bombay Millhands' Association is a Labour Union.

Though in the first period loose associations of labour were formed, *e.g.* the Millhands' Association, the first regular industrial unions were started in Madras in 1918 by Mr. B. P. Wadia among the textile workers and since then the movement has spread to most organized industries and to all provinces. We may take Bombay as an advanced province. In June 1922 there were only 22 unions with a membership of 57,914. By the end of December 1926 the number of unions had become 56 with a membership of 74,875. When a large number of unions arose in an industrial central or in a province, there was a natural tendency towards federation. Thus in the Bombay Presidency we have six federations of trade unions: The Central Labour Board, the Bombay Presidency Postal and R. M. S. Association, the Postmen and Lower Grade Staff Union, The Bombay Port Trust Employees'

* Dr. B. K. Das: *The Labour Movement in India* : p. 49,

Central Union, the G. I. P. Ry. Staff Union—all these are in Bombay, and the Labour Union in Ahmedabad. The next step was marked by the formation of the All India Trade Union Congress which held its sitting in Bombay in November 1920. Every year conferences of provincial unions and the All-India Trade Union Congress are held. In 1922 an All-India Railwaymen's union was formed for the whole of India and Burma. It has a Central Standing Committee at Delhi which negotiates directly with the Railway Board.

It should be noted that the Indian Labour Movement has not been inspired by Radicalism. The unions accept the existing social structure, the capitalistic system of production and the wage system of payment. The main object is to improve the condition of workers by 'collective bargaining'. We are not surprised at their pacific attitude when we remember that organized wage-earners are an infinitesimal fraction of the total population, with practically no political power. It is otherwise in the West. There the organized labourers are numerically the strongest class, possess great political power and have in their network of unions a powerful weapon for carrying on a systematic warfare against the capitalists, and even against Government.

In the earlier stages the movement adopted entirely peaceful methods. Representations used to be made to Government by means of memorials, petitions and deputations. The movement has its own organs and on the whole it receives the support of the press and the public platform. Latterly strikes have become a frequent weapon of warfare. Some idea of the frequency, magnitude and results of industrial disputes

can be obtained from the following summary for the Bombay Presidency for the period 1st April 1921 to 31st March 1926.* In this context the word 'dispute' means an interruption of work involving 10 or more persons and of not less than 24 hours' duration. There were 492 such disputes, out of which 14 were strikes on a large scale. The strikes were most frequent in the Spinning and Weaving Mills. Two big strikes occurred at Ahmedabad (Oct.-Nov. 1921 and Aug. 1922) and two at Bombay (Jan.-March 1924 and Sept.-Dec. 1925). The total number of workmen affected by all the disputes was 7,09,712 and nearly 24 million working-days were lost. The principal causes of disputes were: pay and allowance, hours of work and leave conditions, dismissal and reinstalment of particular individuals, bonus, conditions of work (as, for example, supply of bad material), political cause (*viz.* in connection with the anniversary of the death of Mr. Tilak) and others. In nearly 45 *p.c.* of the cases the dispute was due to pay and allowance. Thus all the 4 big strikes referred to above arose out of this cause. At Ahmedabad the dispute was about the continuance of the scarcity allowance, and at Bombay, about the continuance of the bonus, and the last strike was caused by the proposal of the mill-owners to reduce wages by 11 *p.c.* The strike came to an end when the mill-owners agreed to abandon reduction when the Government of India suspended in Dec. 1925 the Cotton Excise Duty and finally abolished it in March 1926. 22 *p.c.* of the strikes arose out of dismissal or reinstalment of a jobber or *mukadam*. About 25 *p.c.* of the disputes lasted for a single day

* Cf. *Bombay Labour Gazette*, May 1926,

and as many as 90 *p.c.* were settled within a fortnight. Again 27 *p.c.* of the disputes were mainly or entirely favourable to workmen, and 68 *p.c.* were mainly or entirely unfavourable to them.

The frequency of the disputes and their unfavourable termination in so many cases (from the point of view of workmen) point to the weak spots in the Labour Movement. As Prof. Rushbrook Williams says* "The development of the Trade Union movement has been conditioned by the peculiar characteristics of the Indian Labourer. The Indian workman is predominantly illiterate, and has few leaders from his own class to whom he can turn for guidance. In consequence, trade-unionism in India has been largely led by middle class men, professional lawyers and others, who have not in all cases distinguished between economic and political considerations. Moreover, with the exception of the unions which have been built up in the larger towns, on the railways and in some public utility services, the majority of these bodies still bear the mark of their origin as Strike Committees. Very often, as soon as a strike is settled, the union disappears as it has no regular constitution or definite subscription; no system of auditing or publishing accounts and no funds for providing help to women and children in times of distress". Trade unions cannot make much progress unless they place before them a regular programme of constructive work, have a definite constitution and permanent funds. The object of the Indian Trade Unions Act that was passed in 1926 Feb. is to promote the healthy growth of trade-unionism in India. Under that Act each Local

* *India in 1924-25* : pp. 246-47.

Government is required to appoint a Registrar of Trade Unions for the province. On being satisfied with the information as to constitution, object, etc. the union is given a certificate of registration. Trade unions were left free as to whether they should get themselves registered or not. Registered trade-unions were required to confine their expenditure to definite trade union objects, to submit their accounts to a regular audit and to provide for a certain proportion of actual workers on the executive. On the other hand, they were to receive a substantial measure of protection from civil and criminal liability. They were allowed to constitute a *separate* fund by *optional* contributions to be utilized for the promotion of civic and political interests of the members of a trade-union. As the Hon. Sir B. N. Mitra said in concluding the debate in the Legislative Assembly on the Act, that "it will help trade-unions to make a beginning on right lines in the direction of organizing and educating the labouring classes and of starting co-operative institutions for conferring on them benefits in various directions. It is on this organization, education and co-operation that the uplifting of the labouring classes in this country will depend more than on any amount of legislation that this Assembly may pass."*

(9) THE PHILANTHROPIC MOVEMENT—Let us finally consider what is being done for the 'welfare' of workmen by philanthropic effort on the part of employers or private associations or even of the State. For here the co-operation of all is needed. The Sixth International Labour Conference held at Geneva

* *India in 1925-26*: p. 117.

drew attention to the importance of this subject. Welfare-work can be classed under four heads:* Education, Health, Housing and Recreation. Education comprises the provision of schools, and of reading rooms, writing rooms and libraries. Under Health, we have facilities for medical attendance and the supply of medicines. The problem of Housing is complex. In Bombay, for instance, the Port Trust, the Municipality, the Improvement Trust and Development Directorate provide accommodation for the whole or part of their own staff. The Government of Bombay and the Improvement Trust have done much in relieving congestion in the city. The Development Directorate contemplated the provision of 50,000 tenements. But on account of industrial depression and other causes the scheme had to be abandoned and by December 1926 only 16,544 tenements were ready. Of these only 5181 were let out at rents which involve an annual loss of 20 lacs of Rs. Under Recreation, we have facilities for out-door sports, for indoor games and entertainments. Among Associations that take prominent part in such activities we may mention the Servant of India Society, the Social Service League and the Currimbhoy Workmen's Institute at Bombay and the Labour Union at Ahmedabad.

* Cf. *Bombay Labour Gazette*, Vol. VI., No. 5.

CHAPTER XII

MOBILIZATION OF INTERNAL CAPITAL

(I) THE HOARDING HABIT—As in the case of labour we have the paradox of paucity of capital in the midst of a plethora of hoarded wealth. If labour is unsteady and intermittent, capital is secretive and shy. In both cases the elements of economic prosperity are there, but they need careful handling and organization.

In regard to capital we should distinguish between the *saving* and *investment* of capital. A great deal of saving is no doubt going on in the country but it is in the crude form of hoarding. This hoarded wealth is of no use for industrial development. It is capital that is *invested*, i.e. placed at the disposal of others for a consideration that matters from the productive point of view.

Much has been said about the hoarded wealth of the country. The hoarding habit was the result not only of political insecurity but also of social custom. Agricultural income is seasonal and uncertain; but the joint family necessitates a lot of periodic expenditure on births, marriages and other ceremonies and it is met out of hoards or by converting ornaments into cash, or in the absence of either, by borrowing. It has been said with truth that in India the womenfolk are the banks. Surplus wealth is deposited *upon them* in the form of ornaments.

Sir Dadiba Dalal, in his Minority Report on Indian Exchange and Currency 1919, points out how the

hoarding habit was confirmed by the currency policy of the Indian Government. Before the closing of the mints to silver in 1893, silver bullion could be converted into cash without appreciable loss. "With the closing of the mints to the free coinage of silver this traditional equality of silver with rupees was broken. Rupees became of more value than silver. That change by itself was startling enough to the poorer and uneducated classes, but while it had the effect of depreciating the value in rupees of their holdings of silver, it gave them the opportunity of putting future savings into the customary form of silver at an advantageous rate relatively to rupees."* While this explains the absorption of silver, the absorption of gold was aggravated by the subsequent policy of Government to issue rupees—now a token coin—in redundant quantities. "It is this circumstance that is to a very large extent responsible for the extraordinary demands for gold and sovereigns in India. It virtually compels the Indian people to seek full value for the token money with which they have been over-supplied for ordinary currency purposes, and is thus largely responsible for the hoarding of gold of which so much is heard. India's hidden stores of gold can never be expected to be used profitably for the benefit of the holders or of the State so long as no reasonable assurance is provided that, when used, they will remain a gold asset, and that assurance is not provided by a currency in circulation entirely composed of or based upon token coins."†

* *Minority Report* of Sir D. M. Dalal : p. 55.

† Sir D. M. Dalal : *Minority Report* : p. 51.

Whatever the motive for hoarding, the magnitude of the hoarded wealth has been exaggerated and its composition misunderstood. In the first place, though the *desire* to hoard is strong, *ability* to do so is strictly limited by the margin available of production over consumption. When there is a general cry that the productivity of Indian labour is *low*, and at the same time it is contended that the standard of living is appreciably *rising*, it follows that not *much* saving is being done. Again, the growing indebtedness of the agriculturists is inconsistent with their hoarded wealth. Further, there is a velocity of circulation even of hoarded wealth, and rising prices, visitations of famines and other calamities and the break up of joint families *increase* that velocity. Next as to the *composition* of the hoarded wealth. It would be wrong to imagine that this wealth is in the form of large treasures secreted under the ground or in some other form. In a vast and populous country like ours the hoards really consist of "that indefinite but very large sum made up of the innumerable small sums held in cash or jewelry by the millions of small cultivators who form the bulk of the agricultural population of India".*

(2) ENCOURAGEMENT TO INVESTMENT—The problem is how to mobilize these tiny hoards into productive channels. Given the *ability* to save, we must encourage the habit of *deposit* and *investment*. In making a *deposit* our primary object is safe custody, though the rate of interest is an additional inducement. Institutions like the Post Office Savings Banks and Co-operative Banks encourage thrift and the habit

*Dr. Leake : *Foundations of Indian Agriculture* : p. 232.

of depositing money. Ordinary banks also afford facilities for depositing. In the provision of such facilities India is very backward. We might exclude the Exchange Banks for this purpose as they cater for a limited class of the population. The Indian joint stock Banks are few in number. "The Imperial Bank of India in 1925-26 possessed 161 branches of which 75 were situated in centres where no other joint stock banks were represented. And yet there are nearly 500 towns in India with a population exceeding 10,000 each which do not possess a modern bank."* Though there is much scope for the development of banking the growth in deposits that will result therefrom will *add* to the total volume of currency and thus tend to a rise in prices. But increased deposits will not of themselves lead to the habit of *investment*.

In making an investment we have the *security* of the loan as well as the *rate* of interest in view. Investments are for a *longer* period than deposits. The distinction between the two practically vanishes when deposits are made for *long* periods at an *attractive* rate of interest. Where the security is *perfect*, the rate of interest is bound to be *low*, and where the risk of investment is great, the interest has to be correspondingly high. These elementary principles point to the desirability of having forms of investment where security is perfect and the rate of interest is not unattractive. Government Paper, Loans issued by Municipal Corporations, Bonds and Debentures of similar institutions satisfy these conditions. The External Capital Committee has

* *India in 1925-26* : p. 288.

thus analysed the situation with regard to the development of India's capital resources.* "India already possesses a large store of potential capital but much of it is unproductively locked up in bullion and jewelry. As a general principle we should like to emphasize that the real solution of the problem (of providing the requisite capital) lies in the encouragement of the Indian investor, and the development of India's internal resources. That internal capital is available is shown by the increase in Government Rupee Loans from 145 to 358 crores, and in the paid-up capital of joint-stock companies from 80 to 254 crores, between 1913-14 to 1923-24, an increase of 387 crores. The fact, however, that the net imports of gold and silver since 1913 amount to 482 crores is evidence that large resources are still being hoarded which might be invested." The first thing the Committee recommends is to afford facilities for investment where safety is the primary consideration. Thus it says "that dealings in Government securities should be encouraged, as they possess this quality in the highest degree. If Public Debt Office facilities could be extended to the more important commercial centres outside the Presidency Towns so that all transactions in Government securities could be effected locally, local markets would be created for these securities and local stock-broking would be encouraged. Stock exchanges would then form naturally and lead to dealings in industrial debentures and ordinary shares."† The Post Office Cash Certificates are—or at any rate

* *External Capital Committee Report* : p. 4.

† *External Cap. Committee Report* : p. 6.

were—an attractive investment to the middle class people.

It is when the practice of investment is firmly rooted in the habits of the people that it will extend to securities whose chief attraction lies in the rate of interest. In this connection we must bear in mind the important distinction between 'loan' capital and 'entrepreneur's or business' capital. In the former the rate of interest is *fixed* and *previously* arranged and there is no risk (apart from the risk of the loan). In the latter, the investor also assumes the risk of the business and receives a *fluctuating dividend* on his investment. In such cases, there is a double risk—risk of the principal as well as risk of interest. The typical form of such investments is the shares issued by joint-stock companies. The difficulty of capital in India arises from the circumstance that the rate of interest on 'loan' capitals is *abnormally* high. The Indian capitalists (money lenders) use their funds in making loans to the agriculturists or to the commercial community. In the former case money is advanced on the security of land, and in the latter upon ornaments or other safe assets and the interest is as high as 15 to 50 *p.c.* It is obvious that so long as such high rates prevail for 'loan' capital in the traditional methods of money-lending, the capital available for investment in Government paper (where the rate is small, comparatively) or in industrial stocks and shares (where there is a *greater* element of risk, and the dividend *not* proportionately high) will be limited. In England loanable capital is so *abundant* that it is satisfied with a very moderate rate of interest and so *venturesome* that it seeks investment not only in industries at home but

also in all parts of the world. It is otherwise in India. The loanable fund is comparatively small and hence the *high* rate it expects; it is also *shy* and *conservative* and hence it avoids opportunities for investment which are more than attractive to the English investor. But just as the Indian *ryot* is willing to adopt new methods when they are *demonstrated* to be more profitable, so the Indian capitalist is willing to trust his money in those industries which are *really* paying. He cares for 'safety first.' The well-established textile industries never suffer from lack of capital. It is the new and untried ventures which do not prove attractive to him. And yet it is precisely in the new ventures that the profits are highest.

(3) BANKS AND INDUSTRIES—We must have a correct notion of the need for finance that modern industry experiences at various stages. Prof. D. H. Robertson points out * that this need is felt at three stages. (1) When the venture is floated, (2) when the permanent factories, machinery, etc. are to be erected and (3) when day-to-day payments are to be made for wages, raw materials and the like. The development of facilities for the provision of finance to industry at the three stages has not been the same in all countries. In *England*, on account of her wealth, and the rise of an adventurous and wealthy class of traders and merchants, the initial capital was mostly found by those who were in the industry. Gradually influential 'promoting houses' arose and they undertook to supply the initial capital. The money for *permanent* investment was supplied by those who subscribed to the shares of joint stock concerns. The Stock

* *The Control of Industry*, Ch. V.

Exchange has greatly facilitated such investments. When the industrial concern was once set going it turned to the ordinary banks for the provision of *current* finance in the shape of discounting bills of exchange and advances in other ways. What should be noted is that the *ordinary* banks did not take any *active* share in the promotion of industry in England.

The development of industrial finance in *Germany* was on different lines and is particularly instructive to us. "When the importance of industrialization was recognised by Germany, other countries, especially Great Britain, had already made remarkable progress with their industries. She was poor, and a developed banking system was non-existent. It was, therefore, imperative that all the capital available, whatever it was, should be concentrated and mobilised for ready use. In order to grow in the face of foreign competition, Germany availed herself of every weapon she could think of—tariffs, Government aid by bounties, favourable export rates in transportation and, lastly, the organized aid of banking. Further, German banking and industry grew up together in close co-operation. Even from the very starting of the *Grossenbanken* in the middle of the last century, they have adopted the active promotion of industrial enterprise as one of their main functions, and the reason for this intimate partnership was brought about by the prevailing economic conditions of those days."*

The services which the *Grossenbanken* (the Industrial Banks) have rendered to industries are thus described by Dr. Pillai: "Under the German system, a body of industrial experts and highly

* Dr. P. Pillai: *Economic Conditions in India*; pp. 295-96,

trained businessmen has taken over the functions of the private promoter (of companies)—people who are able to give the most intelligent examination to all schemes put before them, and who insist, before they accept any new proposition, that they shall have a controlling interest in the new floatation, so that they may be enabled to see that, besides the supply of capital resources, the new company also gets skilled technical and scientific assistance and proper business management. The banks as issuing houses are, therefore, able to accept responsibility to the subscribing public as to the future of their concerns. The German banking system has been the General Staff of German industry and, had it not been for this combination between the financier and the captain of industry, Germany would not have attained her high level of business efficiency and her successful industrial leadership.”*

The Indian Industrial Commission gave much thought to the subject of financing industry. It realized that the business experience and technical knowledge available in India were limited. The Departments of Industries in the provinces were expected to supply this deficiency to some extent. But the Provincial Departments have not fulfilled the expectations originally formed of them. The Industrial Commission was in favour of Industrial Banks with certain precautions. Such banks alone can provide the *initial* finance to industries. They would also induce the general public to subscribe with more liberality to shares of joint-stock companies. Thus alone can the capital now lying idle be drawn into

* Dr. P. Pillai : *Economic Conditions in India* : p. 297.

productive channels. Finally, the ordinary banks must be induced to take a more active interest in the current finance of industry. The Industrial Commission made the practical suggestion that Indian industrialists, on the recommendation of the Provincial Directors of Industries, should get 'accommodation' from approved banks.

In the chapter on Co-operation we have seen how we want Land Mortgage Banks for agricultural improvement. We want Industrial Banks for industrial development. In India the development of banking has been not only *inadequate* but *one-sided*. Banking has facilitated *internal commerce* so far as it was necessary to support *external trade*. Banks have not paid any attention to *productive* industry, either agriculture or manufactures. We want an *all-round* banking development. Then only will the capital resources of the country be properly developed and we shall not be required to depend upon 'external' capital. Sir Basil Blackett in a speech delivered in the Delhi University on Nov. 27, 1925 eloquently dwelt upon the possibilities in this direction. "Idle money means idle manhood. Capital newly invested in India's development means the opening of new avenues of employment and will go far to solve the problem of careers for Indian graduates. The new capital required must be India's own capital, if only because the amount that can be safely borrowed from abroad, even if it were forthcoming, is strictly limited in amount. For a century and more India has been accustomed to rely mainly on external capital both for her governmental expenditure and for the development of her industrial resources. To some it may sound fantastic, in view of this historical habit, to talk of India's not only supplying the whole

of her capital requirements but also becoming a lender of capital for the development of other countries. Yet I believe firmly that, given the necessary development of banking and credit facilities and good will and readiness to profit by the counsel and assistance of European businessmen, the time is not far distant when India would be doing both these things. India would seem by nature to be destined to be a creditor country, if only her people will it so.”*

* *India in 1925-26* : p. 289.

CHAPTER XIII

PROTECTIONISM

(I) FISCAL AUTONOMY—We have made out a strong case for the development of industries within our country. We have also seen how in the present transitional economic condition of the country it becomes the special responsibility of Government to create conditions favourable to the growth of industries. Protectionism would include all measures directed towards such a consummation. Regulation of the tariff is only a part—though an important part—of the whole policy of Protectionism. The particular measure to be adopted would depend upon the nature of the handicap from which the native industry is suffering. It might be inadequacy or inferiority of raw material; inefficiency or bad organization of labour; lack of capital; fierce or unfair foreign competition; discriminating transport rates; dumping and the like. The Indian Government must take sustained interest in all these matters and resort to a comprehensive policy of Protectionism.

Before examining the nature of this policy we must dispose of the question: *who* should determine this policy for India? The question, in other words, is that of *Fiscal Autonomy*. We need not dwell at any length upon the process by which the Secretary of State for India came to exercise the fullest and minutest control over the fiscal policy of the country. It was a necessary result of that theory of Parliamentary supremacy over the affairs of India which was built

up after the transfer of the Indian Administration to the Crown in 1858. The Government of India had bitter controversies with the Secretary of State over the Cotton Duties, but they ended in the discomfiture of the Indian Government. Since that time there has arisen in the country a persistent demand for autonomy in fiscal, as in other political, matters. The Montagu-Chelmsford Report admitted this plea. The Report recognises* that educated Indian opinion desires a tariff, and though its reasoning may be fallacious it will not readily concede that the matter should be decided by England. "He (educated Indian) believes that as long as we (Englishmen) continue to decide for him we shall decide in the interest of England, and not according to his wishes; and he points to the debate in the House of Commons on the differentiation of the cotton excise in support of his contention. So long as the people who refuse India protection are interested in manufactures with which India might compete, Indian opinion cannot bring itself to believe that the refusal is disinterested or dictated by care for the best interests of India."† The Joint Parliamentary Committee on the Government of India Bill (1919) also adverted to the mischief likely to arise from the impression that the fiscal policy of India was dictated from Whitehall. In view of constitutional difficulties to the grant of fiscal autonomy by *statute*, the Committee recommended that the same result should be attained by means of *convention*. "Whatever be the right fiscal policy for India, for the needs of her consumers as well as for her manufacturers, it is quite clear that she should have the

* *Montagu-Chelmsford Report* : para. 342.

† *Montagu-Chelmsford Report* : para. 342.

same liberty to consider her interests as Great Britain, Australia, New Zealand, Canada and South Africa. In the opinion of the Committee, therefore, the Secretary of State should, as far as possible, avoid interference on this subject when the Government of India and its Legislature are in agreement, and they think that his intervention, when it does take place, should be limited to safeguarding the international obligations of the Empire or any fiscal arrangements within the Empire to which His Majesty's Government is a party."

We need not pause to examine here how far the principle of fiscal autonomy so adumbrated is a reality. Time alone will show it. But the principle is hedged round with many 'saving' clauses and presupposes compromises at every step. It has the necessary vagueness of a *convention*; it presupposes *agreement* between the Indian Government and the Legislature; the international and Imperial interests of Great Britain are to be safeguarded. It is obvious that the fiscal policy of our country will have to be piloted through many a shoal of international and Imperial arrangements or agreements before it reaches the haven of autonomy.

(2) FREE TRADE—Given the necessary power, *what* should be that policy: Free Trade, Protection or Imperial Preference? The days of Free Trade are over as even England, which championed this policy when almost the whole world was protectionist, is veering round to Protection or Imperial Preference. India had all along a Free Trade tariff practically till 1916, when under the stress of increasing the revenues of the country the customs duties were successively increased. Even now,

though some duties are high, they are based upon fiscal considerations and not inspired by Protectionism.

Let me add a word here about customs duties. They are either *specific*, *i.e.* the duty is expressed as a definite sum to be paid for a definite weight or measure of the commodity, or *ad valorem* in which case the duty is expressed as per centage of the value of the commodity. Each form of duty has its own advantages and disadvantages which need not be discussed. The Indian tariff is based for the most part on *ad valorem* duties. But certain important articles like salt, kerosene oil, liquors and matches are subject to specific duties, and other important classes notably sugar, metals, silk, chemicals and dyes are assessed by means of a special combination of specific and *ad valorem* duties known as 'tariff valuation'. The principle of tariff valuation is that Government from time to time determines the value of the article for purposes of assessment and thereby relieves the customs officials from this part of their task. The sanctioned *ad valorem* rate is then applied to the conventional value fixed for the article. The tariff valuation is thus equivalent to a system of specific duties adjusted from time to time to meet fluctuations in prices, the basis of the duty remaining a uniform *ad valorem* rate. This system to a large extent combines the advantages of both specific and *ad valorem* duties. The collection is as simple as the collection of a specific duty. The importer also is able to calculate ahead approximately what duty he will have to pay. If the adjustments are made at frequent intervals the influence of fluctuations in price will be eliminated and the

public will know the exact rate at which the duty is being levied.

The tariff rates in 1925-26 were as follows. As to *import* duties, we may say that the general duty was 15 *p. c. ad valorem*. But there were exceptions in either direction. Thus food grains, and raw materials for industry, *e.g.* salt, hides and skins, ores, cotton, wool and the like were admitted *duty free*. Some articles paid *special* rates, *e.g.* fish, liquor and spirits; sugar paid 25 *p. c. ad valorem*; tobacco, cigars and cigarettes; mineral oils ($7\frac{1}{2}$ *p. c.*); cotton twist and yarn (5 *p. c.*) and piece goods 11 *p. c.*; and also matches. Machinery paid only $2\frac{1}{2}$ *p. c. ad valorem*. Iron and steel and railway plant pay 10 *p. c.* On the other hand, confectionery, motor cars, motor bicycles, clocks and watches, glass bangles, gold and silver plate pay 30 *p. c. ad valorem*. The list of *Export duties* is small. *Tea* pays Rs. 1-8-0 per 100 lbs. *rice*, 3 as. per maund, *hides* and *skins* 5 *p. c. ad valorem* and *jute*—raw as well as manufactured—pays a small specific duty.

But though some duties are high they are (except in the case of certain steel articles and paper where they are openly protectionist) based upon *fiscal* considerations. A return to a Free Trade tariff is now impossible. The theoretical basis of Free Trade can be put in two propositions: (1) that the capital and labour of a country, if left unfettered by any kind of Government regulation or restriction, would naturally be applied to those industries which would yield the greatest economic return. And (2) that the best economic results, both for the world as a whole and for individual countries would be obtained by each country applying its labour and

capital to those industries in which it had the greatest comparative advantage, and then exchanging the products of those industries for articles which it was not able to produce so cheaply itself. This is the principle of the international division of labour.*

(3) RATIONALE OF PROTECTION—But important limitations have been admitted to both these propositions. As to first, a country may be so backward that it will not be able to devote its labour and capital most effectively not because it is lacking in natural resources or labour force, but simply because of superior foreign competition. And as for the second proposition, in applying the labour and capital of a country to the production of wealth we must have regard to the *quality* as well as *quantity* of wealth. It is true that in the long run the exports pay for the imports. But as important as the equivalence in *value* of the exports and imports is their *nature*. Thus, as Prof. Grunzel points out,† “It is not a matter of indifference whether the articles concerned in the imports and exports are destined for final consumption or for use in further production, *i. e.* whether they are consumers’ goods or producers’ goods. Thus the national economy of a country is certainly more favourably affected when one hundred million marks are used to purchase raw cotton, which will be increased in value many fold in succeeding transformations by the industry of the country, than if the hundred millions had been expended for coffee which would be consumed at the same value. So

* Cf. *Indian Fiscal Com. Report (Maj.)* : para. 62.

† Prof J. Grunzel : *Economic Protectionism* : p. 64.

when machinery, electrical apparatus, railway material etc. are purchased, which find enduring application in the productive processes of the country, a different judgment must be passed on such a transaction from that which is applicable to the importation of fashionable articles of women's apparel, which are merely consumed and do not survive a single season."

Similarly, there is difference in exporting the same *value*, but embodied in one case in a few raw products, e.g. cotton and jute, and in the other, in a wide range of manufactured articles. As Prof. Grunzel says: "The more advanced a nation becomes, the more diversified will be its industrial activities and the exports will embrace a continually widening range of articles. The more concentrated in a single field the exports of a country are, the greater will be the risks attending chance variations in the amounts of the goods produced and the character of the market for them, which will reduce the profits of the business as a whole. In the industrial States of Europe the most important single articles of export never make up more than from 5 to 10 p.c. of the total exports." In this connection the reader should refer to what has been said about the *nature* of Indian imports and exports on pages 70-72 of the book. Not unrestricted Free Trade but regulated Protection will harmonize the interests of the nation with those of the world. There is a 'world economy' and there is a 'national economy.' But as Prof. Grunzel shows, there need not be a necessary conflict between the two. We need not regard 'national economy' as a mere preparatory stage for participation in 'world economy.' The two economies may

* *Ibid* : pp. 38-39.

exist side by side, acting and reacting beneficially upon each other. We should endeavour to promote 'national economy' for in doing so we also promote 'world economy'. In considering the best policy for the promotion of national interests we must bear in mind the nature of modern capitalistic production. In the first place this production depends not so much upon natural resources as upon certain artificial conditions. This gives a lie direct to the principle of the territorial division of labour. Cotton is not manufactured in the country where it grows, or iron ore in the place where it is mined, but rather in the place where the market for the products in question exists and "then the protective policy as belonging to these artificial conditions of production may be regarded as means of developing the productive power of a country. If the natural conditions of production were decisive, Italy would be forced to restrict itself to the cultivation of vine, tropical fruits and the like, while, as a matter of fact, it has manifested a notable growth in prosperity only since the time when by the aid of foreign coal, wool, etc. it secured for itself large-scale manufacturing industries."*

Not only does modern production depend upon the possession of certain acquired habits and faculties, but it also requires the application of a great deal of capital. "But the investment of capital can be advantageous only on condition that production can be specialized, and the possibility of specialization depends upon the extent of the market."† The whole object of Protectionism is to secure the domes-

* Grunzel : *Economic Protectionism* : p. 339.

† Grunzel : *Economic Protectionism* : p. 340.

tic market, which is more stable, more easily accessible and more amenable to control than a distant foreign market, to the business of a country by *political means*. As Prof. Grunzel says : Protectionism includes "the totality of those measures by which the national economy seeks to promote its interests in the world economy field. The essence of the concept includes an inter-relation between national and world economy, between home production and home market on the one hand and foreign production and foreign market on the other".*

The home market may be secured through *negative* measures or *positive* measures, and they may be directed against commodities or against the factors of production, *viz.* labour and capital. Negative measures consist in *excluding* (partially or wholly) foreign *commodities* by import duties, by differential transport rates on imports or by other administrative measures ; in *excluding* or restricting the importation of foreign *capital*, and in the restriction of the immigration of foreign *labour*. Positive measures consist in the grant of subsidies and bounties on production or export of commodities, in the grant of concessions as to transport rates on the exports, in grants to shipping services, or encouragement to the *inflow* of capital or foreign business enterprise or skill or labour when necessary.

Protectionism thus aims at securing the home market for home-production and the general argument in favour of such a policy developed above in the words of Prof. Grunzel may be reinforced by the reasoning of Prof. Pigou approvingly quoted by the

* *Ibid* : p. 125.

Indian Fiscal Commission."

"The main element of productive power, whose development involves a long process, is a population trained in the general atmosphere of industrial pursuits. If a country is entirely agricultural and has no important class of artisans or factory workers, the skill required for starting any particular kind of mill will be very difficult to get. Masters, foremen and workmen must first either be trained at home or procured from abroad, and the profitableness of the business has not been sufficiently tested to give capitalists confidence in its results. For a long time, therefore, it is improbable that any works which may be started will be able to compete on equal terms with well-established foreign rivals—and that in spite of the fact that the industry in question may be one for which the country has great natural advantages. On the other hand, in a country which is already largely industrial, the initial difficulty involved in starting a new industry is likely to be much slighter. For much less time is required to obtain from among a people already accustomed to many varieties of factory work, hands capable of carrying on a new variety of it. Further, in an industrial community, those other important elements of productive power, organized systems of transport and credit, which in an agricultural community may need themselves to be built up before manufactures are established, are presumably already in existence. From these considerations it follows that the case for Protection with a view to building up productive power is strong in any agricultural country which seems to possess natural advantages

* *Indian Fiscal Commission* : para 65.

for manufacturing. In such a country the immediate loss arising from check to the exchange of native produce for foreign manufactures may well be outweighed by the gain from the greater rapidity with which the home manufacturing power is developed. The 'crutches to teach the new manufactures to walk' as Colbert called protective duties may teach them this so much earlier than they would have learnt it, if left to themselves, that the cost of the crutches is more than repaid."*

(4) 'DISCRIMINATING' PROTECTION—Having examined the *rationale* of Protection let us next consider the *cost* of the policy. Duties to be protective have to be sufficiently high to check foreign imports, and generally they raise the price of the protected article to the domestic consumer. This is the burden which the community as a whole is called upon to bear or the sacrifice it is called upon to make in the interest of industrial development. If the price of the protected article is artificially kept high other undesirable results will follow. A conflict might arise between agricultural interests and manufacturing interests. Again, the manufacturing interests will come to exercise an undesirable influence upon the Legislature for securing or augmenting Protection. Or, finally, the manufacturing interests will combine and form kartels or trusts as in Germany or the United States. The Protectionist policy may also call into existence a number of industries that have no real chance of success and their eventual failure means the waste of much capital and labour.

* *Ind. Fin. Com. Report (Majority)* : paras 65 & 74.

It is on account of these pitfalls of Protection that the Indian Fiscal Commission recommended that protection should be applied with 'discrimination,' i.e. 'the temporary sacrifice which even the most successful protection must entail, should be restricted to the minimum necessary to attain the object aimed at.'* Protection should be so applied that the resulting rise in price should be as *moderate* as possible, and should not last longer than necessary; it should not call into existence unpromising industries and it should not rudely disturb the existing balance of trade.

In order further to minimise the dangers of Protection, the Fiscal Commission laid down three conditions which every industry seeking protection must satisfy. The industry must further run the gauntlet of an inquiry by a Tariff Board whose appointment it recommended. An industry that sought protection must be (1) one possessing natural advantages such as an abundant supply of raw material, cheap power, a sufficient supply of labour or a large home market. It must be (2) one which without the help of protection either is not likely to develop at all or is not likely to develop so rapidly as is desirable in the interests of the country. And it must be one which (3) will be eventually able to face world competition without protection. Industries which are new and untried should not be given protection.†

The policy of 'discriminating' Protection as thus enunciated became the subject of a Resolution passed by the Legislative Assembly (16-2-1923) and subse-

* *Indian Fiscal Com. Report (Majority)* : para 88.

† *Indian Fiscal Commission Report, (Majority)* : paras 97-102.

quently accepted by the Government of India. The Resolution ran thus : that this Assembly recommends to the Governor-General-in-Council — (a) that he accepts in principle the proposition that the fiscal policy of the Government of India may legitimately be directed towards fostering the development of industries in India ; (b) that in the application of the above principle of protection, regard must be had to the financial needs of the country and to the present dependence of the Government of India on import, export and excise duties for a large part of its revenues ; (c) that the principle should be applied with discrimination, with due regard to the well-being of the community and to the safeguards suggested in paragraph 97 of the Report of the Indian Fiscal Commission ; (d) that in order that effect may be given to these recommendations, a Tariff Board should be constituted for a period not exceeding one year in the first instance ; (e) that such Tariff Board should be purely an investigating and advisory body and should consist of not more than three members, one of whom should be a Government official.” The first Tariff Board was appointed to investigate the steel industry and later on it examined the paper and paper-pulp industry, cement industry, etc. Government appointed *another* Tariff Board to investigate into the cotton textile industry.

It has been urged that the policy of ‘discriminating’ protection has been so cautiously worded that it will defeat itself. A ‘protective’ duty is bound to affect adversely the finances of the country ; it is also bound to be temporarily burdensome to the consumer. But in the long run it *must* add to the productivity of the consumer. As Prof. K. T. Shah puts it, discrimi-

nation in the *choice* of the industry is legitimate, but not discrimination in the *degree* and *measure* of protection. When once an industry is selected for protection "the fullest, firmest and fittest measure of protection should be given, without a gesture of hesitation, without a murmur of doubt or dissent."* Nor would he exclude *new* industries from the benefit of protection. With regard to the *duration* of protection, the Fiscal Commission approvingly referred to an epigram of Lala Harkisan Lal : 'Nurse the baby, protect the child and free the adult.' Prof. Shah would add that the *embryo* also should be cared for, for who can foretell its possibilities ?

(5) IMPERIAL PREFERENCE—Reference has been made (pages 84-90) to the revival of interest in the question of Imperial Preference as a result of the Great War, and to the efforts that are being made to strengthen the commercial and industrial bonds between the component parts of the British Empire. We need not dwell here upon the history of this question or upon what the self-governing Dominions are doing in this direction. We shall only examine here the *economic* basis of this policy.

Preference means that goods from the favoured country pay duty at a rate *lower* than the general rate or that a *higher* duty (or surtax) is imposed upon goods coming from countries other than the favoured country. As nearly 60 *p. c.* of our manufactured imports are derived from the United Kingdom any scheme of Imperial Preference is bound to prove advantageous to her. Sir Roper Lethbridge—an eloquent advocate of Imperial Preference—said that

* Prof. K. T. Shah : *Trade, Tariffs and Transport* : pp. 277-78.

England and India, thus preferentially united, will represent "an industrial and commercial power, organized according to the best lights of modern economic science, such as the world has never yet seen".*

But though the advantage to England is obvious that to India is not so clear. Indian exchequer will suffer; Indian manufacturers will suffer; Indian producers will suffer; Indian consumers will suffer. Let us see how. If the preferential duty is *lower*, it will yield *less*; if preference is granted by a sur-tax, the exchequer will suffer because of loss of duty on diminished imports from non-favoured countries. Again, it is obvious that the manufactures preferentially imported from the United Kingdom will seriously compete with domestic manufactures. Imperial Preference would, therefore, militate against the policy of the Protection of Indian industries. Indian producers of agricultural products will also suffer—and suffer heavily. We have seen before how nearly 70 *p.c.* of our exports are absorbed by countries other than the British Empire. If we discriminate against *them* in our import duties, *they* will discriminate against *us* by way of retaliation. A tariff-war is thus bound to result from Imperial Preference. It is said that India need not be afraid of retaliation because her exports are *indispensable* to the foreign countries, because they are either raw materials or food grains. But except perhaps in the matter of jute, India is by no means the only producer of the commodities and Indian producers will suffer. The Indian consumers also will suffer. The effect of preferential duties on prices depends

* Sir Roper Lethbridge : *Indian Offer of Imperial Preference* : p. 38.

upon the *proportion* which the particular imports from the favoured country bear to similar imports from other countries. If this proportion is *small*, the price to the consumer is determined by the higher duty on non-favoured countries and preference amounts to giving a bounty to the favoured manufactures at the cost of the domestic consumer. If, on the other hand, the proportion is *substantial*, the price is lowered to the consumer, but the exchequer suffers. "The question, therefore, whether the consumer is or is not penalised for the benefit of the foreign manufacturer depends on the relative importance of the sources of supply. If the portion of the market supplied by the favoured country is large, the burden on the consumer will be small, or possibly there will be no burden at all. So long, however, as the supply from the favoured country is small relative to the total supply, the consumer will suffer." * It will thus be seen that both Protection and Preference are departures from Free Trade and impose loss upon the consumer (and also upon the exchequer). But under Protection the consumer is made to suffer for the benefit of the *domestic* industries; and under Preference he is made to suffer for the benefit of the favoured *foreign* manufacturer.

When regard is had to the peculiar *composition* and *distribution* of India's external trade (as analysed in pages 56-72), Imperial Preference, as previously noted, will not benefit our country. At present the Indian producers and consumers alike are so absolutely and helplessly disorganized that their only safety lies in competition among foreign manufacturers—both as

* *Indian Fiscal Commission (Majority) Report* : para 225.

the purchasers of our raw material and suppliers of manufactured articles to us. Imperial Preference by its very nature will diminish this *foreign* competition and aggravate competition with our *domestic* industries. As a result we shall have to pay *more* for our imports and receive *less* for our exports and abandon all idea of industrialization. In view of the poverty of India it is not proper to call upon the poor ryot to bear a loss for the benefit of the well-organized and strongly-entrenched British manufacturer on the top of the sacrifice he is called upon to make under a protectionist policy for the benefit of his own struggling domestic industries. Indeed the conflict between Preference and Protection is like the struggle between the giant and the dwarf. The dwarf's *demand* for Protection is as *legitimate* as the *importunity* of the giant for Preference is *embarrassing*. It is all 'Heads I win, tails you lose'.

If Imperial Preference is urged in the interest of Imperial solidarity it has been opposed in the interest of world peace. Dr. Pramatha Nath Banerjea asks the question : * "Why should the British Empire try to be self-sufficient? A self-sufficient Empire, conscious of its excess of economic strength and guided by selfish and narrow ideals, would be a danger to the freedom of weak nations and a menace to the peace of the world."

But though Preference may be unsound on *economic* grounds, it is possible to urge it on *sentimental* grounds. As the Montagu-Chelmsford Report puts it † "This real and keen desire for fiscal autonomy does not mean that educated opinion in India is unmindful of

* Dr. Pr. Banerjea : *Fiscal Policy in India* : p. 246.

† *Montagu-Chelmsford Report* : para 342.

Imperial obligations. On the contrary it feels proud of, and assured by, India's connexion with the Empire, and does not desire a severance that would mean cutting the ties of loyalty to the Crown, the assumption of new and heavy responsibilities, and a loss of standing in the world's affairs. Educated Indians recognize that they are great gainers by the Imperial connexion, and they are willing to accept its drawbacks. They recognize that the question of a tariff may be mainly, but is not wholly, a matter of domestic politics." It has been rightly said that the offer for Preference should be a free and spontaneous *gift* and not a *bargain*. This postulates the elevation of India to the full status of a self-governing Dominion. Then it will be a *double* blessing: a blessing to the giver as well as to the receiver. But so long as India falls short of her full stature and so long as there is anti-Indian legislation on the statute-books of the British Colonies the request for Preference is an insult and its adoption amounts to an extortion. No burden will be too great for India if she is made to feel *at home within the Empire*, and the United Kingdom and the Dominions extend to her their fraternal hand and accord to her a position in keeping with her ancient civilization, her great population and immense material resources.

(6) EXTERNAL CAPITAL—We have seen that Protectionism includes measures not only against commodities but also against factors of production, *viz.* labour and capital. India is not in danger of being invaded by *cheap* and *unskilled* foreign labour. In this respect *other* countries fear India and have adopted various measures for the prohibition of the immigration of Indian labour. Nor is India suitable

for 'colonization' by the White population in the narrow sense of colonization. Foreign businessmen who come out to India—as merchants, manufacturers, planters or mine-owners—stay here only *temporarily*, though they make *permanent* investment of capital within the country and by regulating the latter we can also regulate the former.

Reference has been made (p. 49) to the dominating influence of foreign capital upon the character, volume and direction of our external trade. We have also seen that there is real danger of more foreign capital being attracted under a system of Protection. We must admit that foreign capital and foreign capitalists have done much for industrial development. All pioneering work was done by them and Indian enterprise followed in the steps of the foreign businessman, learnt from his failures and avoided the pitfalls into which he had fallen. The advantages of foreign capital cannot be better stated than in the words of the Majority Report of the Fiscal Commission. "Apart from the intrinsic benefits of increased supplies of capital, the foreigner who brings his capital to India supplies India with many things of which, at her present stage, she stands greatly in need. It is on the whole the foreign capitalist who imports into the country the technical knowledge and the organization which are needed to give an impetus to industrial development. It is to him that we must look largely at first for the introduction of new industries and for instruction in the economies of mass production. By admitting foreign capital freely India admits the most up-to-date methods and the newest ideas. If she tried to exclude them, the policy of

industrialization which we contemplate could with difficulty be brought to a successful pitch. We hold, therefore, that from the economic point of view all the advantages which we anticipate from a policy of increased industrialization will be accentuated by the free utilization of foreign capital and foreign resources."*

As against these advantages we must put the following objections urged before the External Capital Committee of 1925. (a) A certain proportion of the profits will go out of the country. (b) Investors will always prefer to choose their own directorate, and will naturally prefer men they know and have a prejudice in favour of their own nationality. The tendency will be the same in respect of the superior staff. (c) The vested interests created by external capital have a tendency to acquire enormous political influence which is usually exercised for the purpose of maintaining the status quo and of vigorously resisting any political progress. (d) External capital may monopolise 'key' industries or industries important from the point of view of national defence. (e) External Capital may exploit the natural and irreplaceable resources of the country such as minerals.†

Opinions begin to differ when we begin to locate the point at which the harm exceeds the utility of foreign capital and consider the nature of the restrictions that should be imposed upon its use. Does foreign capital necessarily bring in its train foreign management and control? If so, have nothing

* *Indian Fiscal Commission (Maj.) Report*: para 289.

† *Report of the External Capital Committee*: para 17.

to do with it. But if the two *can* be separated, there is no harm in using foreign capital and paying it its market price, *i.e.* the stipulated rate of interest. A remarkable feature of modern capitalism is the divorce that may exist between those who may *own* (the shareholders), and those who *direct* (the directors), a business enterprise on the one hand, and those who are the *creditors* of the enterprise (the bond or debenture holders). The last have no *control* over the concern so long as they get their stipulated rate of interest. There is no harm if external capital seeks investment in the form of bonds or debentures in Indian enterprise. In such cases the capital will have been borrowed by *Indians* and all surplus profits will be retained by *them*. The foreign capitalist plays a *passive* part. It is when he, in addition to supplying the capital, also *actively* directs and controls the enterprise that national interest may suffer. In such a case, 'when foreign capital demands as the price of its investment in India, besides a net return by way of interest, complete control and direction of the enterprise started by its aid, we would rather consent to the development of India being postponed than see it accomplished at such a cost.'*

The External Capital Committee makes three classes of foreign investments: (I) Investments in which the external investor is merely entitled to a rate of interest and acquires rights of control only when there is default. To this class belong state and municipal loans, bonds of port authorities, bonds and debentures of private companies and bank loans.

* Prof. K. T. Shah: *Trade, Tariffs & Transport in India*: p. 300.

- (2) Investments in which the external investor enters into competitive business, competing on equal terms with Indian enterprise, as in the case of cotton and other textile mills, mercantile houses and the like.
- (3) Investments in which the external capitalist acquires special privileges or concessions of land which give him exclusive possession or exclusive rights of exploitation of particular portions of the natural resources of India.*

Investments in the first form are advantageous and need not be restricted. Investments of the third type on the other hand need special restrictions to safeguard Indian interests. The concession given to the foreign investors may take the form of a pecuniary concession such as a bounty or the right to exploit a wasting asset such as a mineral concession. In such cases the External Capital Committee recommends stipulations to the effect that (a) the Company should be registered under the Indian Companies Act of 1913 with a rupee capital; (b) a reasonable proportion of directorate should be Indian and (c) reasonable facilities would be provided for the practical training of apprentices.

As for foreign investments in competing industries in India (and these will naturally be the most important) the External Capital Committee thought that any restrictions upon them "would be either impracticable, or disproportionately injurious to the Indian investor."† It is difficult to accept this conclusion. The Minority Report of the Fiscal Commission makes it clear‡ that there is no distinction

* *External Capital Committee Report* : p. 18.

† *Ex. Cap. Committee Report* : para 21.

‡ *Indian Fiscal Com. Report* : p. 203.

between direct concessions (in the form of bounties for instance) and the right to establish industries within the tariff walls. In the one case the Government tax the people while in the other Government permit the consumers to be exploited by means of higher prices due to protective duties." Indeed, as the Minority truly observes, "the right to establish an industrial enterprise behind the tariff wall is a concession in itself."* The same restrictions, therefore, which have been recommended for investments of the third kind should also be applied to investments of the second kind. For then alone will there be some guarantee that Indians will be encouraged to invest their savings in industries, that they will, by association with European colleagues on the directorate, learn the secrets of business organization and management, that they will receive facilities for getting technical education and that a substantial share of the profits of the industry will be retained within the country.

(7) INDUSTRIES AND TRANSPORT—It is needless to emphasize the importance of cheap transport facilities to modern production. In the absence of such facilities international trade, and even trade within a nation, would dwindle to insignificant proportions. The means of transport differ according as we deal with land transport, water transport or air transport. Roads, railways and motors facilitate transport on land, steamers do so on the rivers, along the coast and over the sea, and airships do so through the air.

Consider first *land transport*, and the *railways*, as the means that has revolutionized modern commerce.

* *Ibid*: p. 201.

In the West the construction and maintenance of railways in themselves have become the basis of gigantic industries. A host of minor industries has arisen in connection with them. And secondly, they helped industrial development *indirectly* by a suitable manipulation of rates, rates on manufactured exports being kept low and those on imported manufactures being kept high. In India railways had just the very opposite effect upon industries. The total railway mileage by the end of March 1926 was 38,552. But until quite lately railways were constructed, maintained and worked almost in the complete absence of the basic industries. The requisite materials were imported from abroad, mostly from England. There has been a persistent demand for the purchase of the railway stores from within the country. When Government decided to spend Rs. 150 crores on the post war rehabilitation and expansion of railways, the Legislature appointed a special Railway Industries Committee, but the actual results have been quite inadequate. The Tata Works at Jamshedpur no doubt supply a considerable portion of the steel required by railways and the workshops at Matunga and Ajmere are turning out carriages and locomotives but they represent a fraction of the total requirements. Similarly the railway workshops could have been made excellent schools for the imparting of technical instruction to Indians, the Indians so qualified being utilized for the Indianization of the railway service and for the development of other industries. But nothing has been done beyond faint and half-hearted beginnings in recent years.

Not only did the railways not *directly* contribute towards industrialization but they, by their narrow policy of rate fixation, positively injured and almost killed

what industry was existing in the country. The Government of India, in this vital matter, interfered little beyond laying down the general classification of goods for purposes of rating and the maximum and minimum rates for each class. The railway companies were given the widest powers in putting particular commodities into particular classes and applying the rates within the specified limits. They followed a selfish, or as the Industrial Commission euphemistically puts it, an 'individualistic' policy in this respect. They competed among themselves for the attraction of traffic and as a whole were interested in nipping in the bud the rise of rival transport facilities on the rivers or along the coast. Such a policy has resulted in a perfect jungle of anomalies in the discrimination of rates according to the class, ownership, route and destination of goods, and formed the subject of bitter complaint before the Industrial Commission, the Acworth Committee on Indian Railways and the Fiscal Commission. "Broadly speaking the charge is that the rates are so framed as to encourage traffic to and from the ports at the expense of internal traffic. This means an encouragement to the export of raw materials and to the import of foreign manufactures to the detriment of Indian industries, which often have to pay what are described as unfair rates both on their raw materials transported from other parts of India and on their manufactured articles despatched to the various markets."* This short-sighted policy has throttled Indian industrial enterprise, led to the neglect of river transport and the non-development of coastal trade. Traffic has been concentrated in the

* *Indian Fiscal Commission Majority Report* : para 127.

few principal ports of the country—to the detriment of the health and efficiency of the labouring population.

To remove these anomalies of railway rates the Indian Industrial Commission thought that “the governing principle to be followed in railway rating, so far as it affects industries, is that internal traffic should be treated as nearly as possible on an equality with traffic of the same class over similar distances to and from the ports.”* The Acworth Committee advised the appointment of a Rates Tribunal (consisting a chairman with legal qualifications, and two members, one representing the railways and the other the commercial interests) to consider applications for the redress of grievances on the score of unreasonableness of rates or absence or inadequacy of railway facilities. Such a Rates Tribunal has been recently created.

Even when the railways adopt a more ‘national’ policy as to rate-fixation, there will be need for improving alternative or additional transport facilities. The total mileage of metalled and unmetalled roads maintained by public authority for the whole of India was only about 216,000 in 1923-24.† This is quite inadequate. In view of the possibilities of motor-transport we want more and better roads, for the development of the forest regions of the country and for the linking up of vast stretches of country to the railway system. Good roads are necessary feeders to railways.

Nor can we afford to neglect our water ways. It is true that our peninsular rivers are not quite favourable for navigation purposes. But as early as the middle of the last century Sir A. Cotton, the great

* *Ind. Ind. Com. Report* : Para 272.

† *India in 1923-24* : p. 170.

champion of canal construction, recommended the construction of five water ways in India, from Calcutta to Karachi up the Ganges and down the Indus, from Coconada to Surat up the Godaveri and down the Tapti, a line up the Tungabhadra to Karwar on the Western Coast and a line up Ponang by Palghat and Coimbatore.* But the railway interests successfully defeated these projects—and those for coastal trade—and to this day the complaint stands that the magnificent water-ways of the country have been neglected. The Acworth Committee referred to the notorious 'Broach Case' in which the B. B. & C. I. Railway by unfair railway rates 'killed' a coastal service between Bombay and Broach. "The Broach block rates lasted from 1910 to 1919 and the memory of them is still green in the hearts of traders all over India."† Water transport has certain natural advantages over railway transport: no costly road-bed is necessary; haulage over water is much less costly than upon land; bulky articles are specially suited for water-transport. In other countries, therefore, *e.g.* in Belgium, Germany and France water ways have been developed to the utmost extent and they *supplement* railways.

Turning next to oceanic transport we have overseas trade and coastal trade. Some account has already been given, in the fourth chapter, of the magnitude, nature and direction of the sea-borne trade of the country. The Indian Mercantile Marine Committee (1923-24) was appointed to ascertain the share of Indians in this carrying trade and suggest means to

* Prof K. T. Shah: *Trade, Tariff & Transport*: p. 409.

† *Acworth Committee Report*: para 154.

increase that share. It generally admitted that the "proportion of the trade on the coast which is carried in ships owned by Indians is comparatively small, while the number of Indian ships which take part in the overseas trade is practically negligible."* It is difficult to calculate what India has to pay annually for the shipping service rendered by non-Indian ships. Prof. Shah would put it roughly at 10 crores for coastal shipping and 20 crores for overseas trade. Thus the annual tribute comes to not less than 30 crores of Rs.† Can we not divert a substantial portion of this tribute to Indian pockets? The Mercantile Marine Committee deputed one of its members, Sir John Bile, to study how Japan built up a mercantile marine. This marine began about 1870. From small beginnings it increased to 3000 ships with a gross tonnage of 2·8 million tons at the end of 1922. The State gives encouragement to the shipping industry in various ways. Subsidies are given to about 15 shipping companies plying in foreign waters, as much as 125 lacs of Rs. being given away in 1921-22. Subsidies are also given for the *construction* of ships.

To build up an Indian marine, we must first of all train a large number of Indians as deck-officers and engineers. The existing British Companies should be required to train such Indians, for the privilege of shipping in 'home waters' is a 'concession' and a stipulation as to training of apprentices, as we have already seen, is legitimate. But we want ships not only *manned* by Indians, but owned and managed by Indians. Indeed, as the Committee points out, "an ideal Indian

* *Indian Mercantile Marine Committee Report* : p. 19.

† *Of. Prof. T. K. Shah : Trade, Tariffs, etc.* : pp. 428-30.

marine would be of ships *built* in India, *registered* in India, *manned* by Indians, *owned* by companies with rupee capital and Indian directorates and shares owned by Indians, and *managed* by Indians." This ideal cannot be reached unless the coastal trade is *entirely* reserved for Indians. The Mercantile Marine Committee is agreeable to the exclusion of *foreign* (i.e. non-British) ships from Indian coastal trade. But this won't suffice as the coastal trade is preponderatingly in British hands. We must consider the feasibility of excluding *British* ships from coastal trade. Even Australia has done it under a system of licenses. The Mercantile Marine Committee recommends "the eventual reservation of the Indian coasting trade for ships the ownership and controlling interests in which are predominantly Indian" under a system of licenses. Along with shipping attention must be paid to *ship-building*, by a suitable system of bounties.

Regarding *Air transport*, reference has been made (p. 88) to the attention paid to the improvement of Imperial air routes. For years to come, however, they will be under Imperial control.

(8) THE INDIAN COTTON TEXTILE INDUSTRY—As an illustration of the difficulties that Indian industries have to face we may take the cotton textile industry. It is an old and established industry; it is mainly in Indian hands; the prosperity of the city of Bombay—and of the whole Presidency—is bound up with it; it was recently fully investigated by a special Tariff Board. A reference to the main findings of this Board will be an excellent commentary upon the various obstacles that lie in the path of industrialization.

The Tariff Board divided the history of this industry into four periods: 1899-1913, a period of steady growth; 1914-1918, the War period, which was one of 'arrested development'; 1919-21, the post-War period, which was a 'brief period of abounding prosperity'; and finally 1923-26, which is a 'period of depression'.

In the beginning the Indian cotton mill industry was a spinning industry, and nearly half the yarn produced was exported, mainly to China. On account of a variety of causes, this export trade in yarn declined, and since then the tendency has been to utilize the yarn for the manufacture of cloth. Thus from a *spinning* industry, it became, mainly, a *weaving* industry. In the War-period, there was a diminution of the imports of cloth from the United Kingdom. This deficiency gave an excellent opportunity to Japan who since that time has been steadily increasing her exports of yarn and cloth to India. The period of prosperity that followed the War was not due to any internal improvement in the industry itself. It was due 'rather to world factors, or, in other words, was a reflection from the hectic world-wide boom than to natural development'.* This spell of prosperity produced its necessary results. There was a strong tendency towards over-capitalization. New mills were started, especially outside Bombay, more machinery was ordered and installed. "The capital investment in the industry almost doubled between 1917-18 and 1921-22, the figures being Rs. 20·84 crores of Rs. and

* Report of the Indian Tariff Board (Textile Industry): p. 10.

Rs. 40·98 crores of Rs. respectively.”* Next there was the distribution of enormous dividends during this period. The mill-hands also participated in this prosperity by successive enhancement of wages, until the latter were 87 *p.c.* above the pre-War level.† The inevitable period of depression followed. The extent of the depression can be gathered from the following figures. “The net profits of the industry fell from 388 lakhs in 1922 to 33 in 1923, and became a loss of 92 lakhs in 1924 and 134 lakhs in 1925.”‡ Bombay has been the worst sufferer. The reserve funds were drawn upon to tide over the crisis and nearly exhausted. Ahmadabad also suffered, though not to the same extent.

The present position of the textile industry can be seen from the following table, compiled from the Report of the Tariff Board.

* *Ibid*: p. 18. † p. 114. ‡ *Ibid*: p. 24.

	No. of Mills working	No. of Spindles	No. of looms	No. of spindles per loom	Mill Production in million lbs.		Export of yarn mil'n. lbs.	p.c. of Ex- port to Pro- duction	Export of cloths. mil'n. lbs.
					yarn	cloth			
1898-99									
Bombay	74	2,338,697	22,209	105	514	102	244	47.4	112
Rest of India	93	2,211,094	15,946	139					
Total	167	4,549,791	38,155	119					
% of Bombay to all India	44.3	51.4	58.2						
1912-1913									
Bombay	77	2,806,566	44,804	63	355	138	207	30.3	130
Rest of India	159	3,513,462	47,683	74	328	136			
Total	236	6,320,028	92,487	68	683	274			
% of Bombay to all India	32.6	44.4	48.4	—	52.0	50.3			
1917-1918									
Bombay	86	2,882,648	59,162	48	306	177	73	11.7	187
Rest of India	163	3,679,989	56,656	65	309	172			
Total	249	6,562,637	115,818	56	615	349			
% of Bombay to all India	34.5	43.9	51.0	49.7	50.7				

	No. of Mills working	No. of Spindles	No. of looms	No. of spindles per loom	Mill Production in million lbs.		Export of yarn mil'n lbs.	p. c. of Ex- port of yarn to Pro- duction	Exports of cloths, mil'n lbs.
					yarn	cloth			
1920-1921									
Bombay	83	3,025,488	62,763	48	349	207	88	12.6	187
Rest of India	162	3,820,336	60,781	62	344	196			
Total	245	6,845,824	123,544	55	693	403			
% of Bombay to all India	33.8	44.1	50.7	—	50.3	51.3			
1924-25									
Bombay	79	3,330,065	70,204	47	327	220	46	6.3	230
Rest of India	195	4,531,039	76,249	59	392	239			
Total	274	7,861,104	146,453	53	719	459			
% of Bombay to all India	28.8	42.3	47	—	45.5	47.9			

The Tariff Board draws the following conclusions with regard to that position. (1) The expansion of the industry in every direction, but especially in weaving as compared with spinning. The expansion of spinning has been the result of the expansion of weaving than the reverse. In 1899 the Indian mill production of cloth was only a little over $\frac{1}{8}$ of the net imports and about $\frac{1}{2}$ of the production of the handloom industry. At the end of 1922 it was 77 *p.c.* greater than the one and 50 *p.c.* greater than the other. In 1899-1900 Indian mills supplied 9 *p.c.* of Indian requirements of cloth, against 64 *p.c.* met by imports and 27 *p.c.* met by the handloom industry. In 1921-22 the percentages were 42, 26 and 32 respectively. (2) This change in the nature of the industry was due, as noted before, to the loss of export trade to China. (3) It will also be seen that Bombay is losing its place of predominance in the home industry. (4) Finally, there is an increasing domination of the home market by the imports from Japan.

The Tariff Board has very fully gone into the *causes* of the present depression. They can be grouped under four heads: (a) causes due to world factors; (b) causes arising out of external competition; (c) causes that affect the Indian cotton industry as a whole; and (d) causes that are special to Bombay. We shall briefly consider them in the order given.

(a) *World Factors*—It has been already seen (pp. 73-74) that the prices of agricultural commodities did *not* rise as much as the prices of manufactured articles. This means that the agriculturists had not sufficient purchasing power to buy manufactured articles. The present depression is, therefore, partly due to decrease in demand, which in its turn

was the result of the unequal rise in the prices of agricultural and manufactured commodities. (2) The phenomenon of a boom followed by depression was witnessed in other parts of the world as well. (3) The price of cotton is coming to be more and more determined by the American Cotton Crop. This was not so, say, twenty years ago. The fluctuations in the price of cotton have, as a result, become more violent. "The fluctuations in the price of the raw material in recent years must be regarded as one of the most important causes of the condition in which the industry finds itself to-day."*

(b) *External Competition*—This arises from the import of yarn and piece-goods from the United Kingdom and Japan. The Tariff Board has fully investigated the nature and extent of Japanese competition. Its conclusion is that the competition of Japanese yarn does exercise a depressing effect on the price of Indian yarn. That is why the spinning mills as a whole are worse off than those mills which combine both spinning and weaving departments. As for piece-goods, the conclusion of the Tariff Board is that Japanese cloth of below 30 counts does not compete with similar cloth made in Indian mills. But Japanese cloth of superior counts is sold in India at a price equal to or less than the cost of production of such cloth in Indian Mills. The imports of these piece-goods, therefore, do exercise a depressing effect upon the Indian industry.

The advantages which Japan enjoys over India, so far as the textile industry is concerned, are partly natural and partly artificial. The climate of Japan is

* *Tariff Board Report* : p. 32.

more suitable to this industry. Japan has the advantage of operating in the American cotton market as well as the Indian cotton market for the supply of raw material. The artificial advantages arise out of (a) fluctuations in exchange, (b) inferior conditions of labour in Japan and (c) help given to the industry by the State. With regard to the last it is sufficient to note that the Japanese Government takes an active part in the promotion of industries of all kinds. The textile industry is only one among many other industries that enjoy the active support of the State. Regarding *Exchange*, it should be noted that the advantage was of temporary duration and lasted so long as there was the depreciation of the Japanese currency. The exchange depreciated from Rs. 152=100 yens in December 1923 to Rs. 107=100 yens in Jan. 1925. During this period the exports of yarn as well as cloth from Japan were stimulated. The yen began to recover after Jan. 1925 and the advantage, so far as exchange is concerned, is now not appreciable. As for *labour conditions* in Japan, the first point to be noted is that the textile industry in Japan employs many more women than it employs men. The proportion of women to men for the whole industry is 3·8 to 1. In India the position is almost exactly reversed, the proportion of men to women being 4·3 to 1. This, by itself, would give an advantage to Japan. But Japan has not yet given effect to the series of Conventions adopted at the annual International Labour Conferences which the Indian Government has been ahead of most other nations in doing. The conditions of labour in Japan are, therefore, *inferior*. "In India, the hours of labour for adult males are restricted to 60 per week. In Japan, there is no restriction. In India, juveniles

under 16 may not be employed in any factory for more than 6 hours a day. In Japan, juveniles under 15 may be employed up to 12 hours a day in the cotton-spinning mills when a single shift is worked and upto 11 hours when two shifts are worked. They may be employed up to 11 hours a day in the cotton-weaving industry. In India, the employment of women and children by night is entirely prohibited. In Japan, both women, and children under 16 years may be employed at night until June 30th 1929. To the extent that conditions of labour in Japan in these respects are inferior to those in India, and to the extent that they bring down the cost of production in the Japanese industry, it must, we think, be held that there is unfair competition between Japan and India.”*

(c) *Causes affecting the Textile Industry as a whole*—We shall postpone the consideration of the effect of exchange to the next Part. We have already seen that the industry suffered from over capitalization. Greater caution in capitalization and more prudence in the distribution of dividends would have left the industry in a better position to face the inevitable period of depression. The Bombay mills are more to blame in both these matters and that is why the present depression has hit them hardest. This naturally leads us on to consider (d) those *causes of depression that are special to Bombay*. The foremost is the loss of the China market for Indian yarn. Bombay had a monopoly of this export trade. From the beginning of the textile industry in Bombay yarn used to be exported to China. The first set-back to

* Tariff Board Report : pp. 69-70.

this trade was received on account of the closing of the Indian mints to silver in 1893. There was a recovery later on and in 1906 about 297·6 million pounds of yarn were exported, and of these 282 million lbs. went to China. Since then the exports have steadily declined. Japan has captured that market and the textile industry is making rapid progress in China itself. Not only the export trade in yarn declined, but that in piece-goods also. Along with the loss of the foreign markets for yarn and cloth, there was growing competition for supplying the demand of the home market. New centres of the textile industry are rising in the cotton-growing tracts and they possess natural advantages of one kind or another which Bombay does not possess. Indeed Bombay has two positive handicaps—(1) The high cost of labour, (2) high local taxation. Both these impose an unbearable burden upon the Bombay mills. The money wages cannot be reduced and the salvation of the Bombay mills lies in increasing the efficiency of the labour-force. The local taxes on the other hand ought to be reduced.

We may pass over Chapters IX and X of the Report in which the Tariff Board makes valuable suggestions for the internal improvement of the industry. The mills must produce a greater variety of piece-goods and they must pay more attention to the marketing of their wares. Not only the upcountry markets in India, but also the foreign markets must be properly attended to. We have already seen that the foreign market for Indian piece-goods is declining. This is in sharp contrast to the phenomenal increase in the exports of Japanese piece-goods to different parts of the world. The value of these exports was only 73·2 thousand

yens in 1916. It became 432·9 thousand yens in 1925.*

But though the Tariff Board was unanimous as to the diagnosis of the causes of present depression, it was divided on those recommendations that involved changes in the Indian tariff. The Majority (consisting of the two Indian members) was opposed to the imposition of any additional duty on *yarn* as it would adversely affect the handloom industry. It was in favour of an addition to the present 11 *p.c. ad valorem* duty on piece-goods. Such a *small all-round addition* to the existing tariff has some advantages. It gives protection against external unfair competition. It avoids complications arising from discrimination against particular countries, *e.g.* Japan, which might retaliate. It is easier to administer than a differential duty. The Majority proposed that the proceeds of the additional duty should be utilized in giving bounties to the Indian mills for the production of yarn of superior counts. The President of the Tariff Board was opposed to the scheme of giving bounties for the production of yarn. He also saw no point in excluding yarn from any enhancement of duty that might be adopted. He held that as the main cause of the present depression was unfair *Japanese* competition the imposition of a *differential* duty of 4 *p.c.* on all cotton manufactures (piece-goods as well as yarn) imported into India from *Japan* would meet all the requirements of the situation. The Government of India took full advantage of these serious differences of views of the Tariff Board. In the Resolution that they published reviewing the Report of the Tariff Board, they argued that there was no necessity of

* *Report* : p. 165.

doing any thing at all. Thus this old and well-established Indian industry was confronted with ruin. There was renewed agitation in the country, and it was the personal interest of H. E. the Viceroy that finally granted a modicum of help to this industry. By the measures that were finally adopted by the Indian Legislature, the duty on mill-stores required for the textile industry was abolished, and a duty of 5 *p. c.* was imposed upon *yarn* only of specified counts.

The history of the Tariff Board on the Indian textile industry is instructive. It illustrates the conflicting interests which any proposed measure for the improvement or 'protection' of an Indian industry must avoid. Too much deliberation is not conducive to vigorous action. Caution may be carried to the point of timidity. One is reminded of what King Dushyanta thought to himself when he saw a bee naively descending upon the cheeks of Shakuntala. While *he* was hesitating and deliberating the bee forestalled him.*

* वयं तत्त्वान्वेषात् मधुकर हतास्त्वं खलु कृती-
शकुंतला.

Translation :—"We have been undone, oh Bee! by too much deliberation; you alone must be truly said to have accomplished the object of your desire."

PART III

CURRENCY AND EXCHANGE

CHAPTER XIV

HISTORICAL

(1) INTRODUCTORY—In any treatment of the subject of Indian currency and exchange the history of the subject must occupy an important place. In attempting such a historical sketch, however, there is danger of too many details clouding the main points at issue. There is also the danger of exclusive attention being paid to the purely *Indian* problem of currency and exchange, as separated from the monetary problems with which the civilized world was confronted from time to time, and will be confronted for years to come. In the historical account that follows I have tried to minimise details, and at the same time to emphasize the *international* aspect of the monetary problems of India.

We may divide the history of Indian currency into the following periods.

- (a) Before 1806—Gold and silver coins of various denominations current in different parts of India. There was no fixed ratio between gold and silver, and as a result there was much confusion.
- (b) 1806—1835—Silver rupees (of varying fineness in

the three Presidencies) were adopted as the standard money of account.

(c) 1835—1862—Silver rupees of uniform fineness adopted as the universal coin for the whole of British India.

(d) 1862—1874—The first 'gold standard' controversy. It fails on account of a theoretical objection to a 'Double Standard.'

(e) 1873—1893—Depreciation of silver and falling exchange. Attempts at International Bimetallism.

(f) 1893—1898—Suspension of the coinage of rupees; consequent rise in exchange.

(g) 1898—1915—Stabilization of the ratio at 1s. 4d. through the mechanism of the 'Gold Exchange Standard.'

(h) 1915—1925—Indian currency during and after the War. A period of disastrous experiments.

(i) 1926—Reconstruction of the monetary system in the light of the Hilton Young Commission on Indian Currency and Finance.

(2) CURRENCY HISTORY UP TO 1898: 1806—1835—1862—It is not necessary to dwell upon the inconveniences of a currency consisting of gold and silver coins—often debased and clipped—of varying denominations, unrelated to each other. It was a step in the right direction, therefore, when in 1806 the Government of India laid down that silver should be the universal money of account in India. One wishes that the choice of the Indian Government had fallen upon the *yellow*, instead of the *white*, metal. But in

that case we should have anticipated the introduction of the gold standard in England itself by full ten years. There were many gold coins current in the country. They were allowed to remain in circulation. Different Presidencies, however, minted rupees of different fineness and it was not before 1835 that a uniform silver rupee of 180 grains (troy) $\frac{1}{2}$ fine (*i.e.* containing 165 grains of pure silver) became the standard coin for the whole country.

1862-1874—Monetary stringency began to be felt with the growth of commerce and increase in external trade that followed the construction of railways. There was a steady excess of exports over imports and consequently a 'favourable' balance of trade liquidated by the import of the precious metals. But as gold was not used for monetary purposes, the whole burden of making additions to the currency fell upon silver alone. The difficulty with which the Indian Government was faced after the Mutiny was this: how to relieve the monetary stringency from which the country was suffering? A permanent solution of the difficulty lay in three different directions: (a) introduction of the gold currency to supplement or supplant the existing silver currency; (b) supplementing metallic currency (gold or and silver) by paper currency; (c) development of banking. As banking was then in a very rudimentary condition, the practical choice lay between the introduction of a gold currency and that of a paper currency. Mr. Wilson, the first Finance Member of the Government of India, was somehow opposed to the introduction of gold currency in India. He, therefore, looked upon the introduction of paper currency as the only remedy that could be immediately adopted to add to

the circulating medium of the country.* The principles of Note-issue which he laid down were these. Though the Banks in the Presidency Towns used to have private notes of their own, Mr. Wilson was of opinion that such notes should be issued by the State in India : "The only means by which a paper note circulation can be extensively applied to India, such as shall be universally current and can be made a legal tender, is through the agency of the Government, and that it possesses means peculiarly favourable for the useful exercise of such function." As for the metallic reserve against note-issue Mr. Wilson preferred 'the proportional reserve system' to that of a fixed fiduciary minimum contained in the Bank Charter Act of 1844. He held that by maintaining 'a fixed proportion of silver to the amount of notes in circulation and by keeping for the remainder public securities convertible into silver, the immediate as well as the ultimate convertibility of the notes would be placed beyond doubt, and that a natural and self-acting limit would be placed upon the amount of the circulation : a limit which would expand and contract according to the wants of the community, in the same manner and to the same extent as a purely silver currency would do." As fate would have it, Mr. Wilson died before effect could be given to all his financial reforms and his successor, Mr. Samuel Laing, adopted the more orthodox principle of the Bank Charter Act and the fiduciary limit was fixed at 4 crores of Rs. Unlike Mr. Wilson, Mr. Laing was a strong advocate of a gold currency for India. But he had to yield to the opposition of the Secretary of

* Cf. Findlay Shirras : *Indian Finance and Banking* : pp. 237-50 for the early history of Paper Currency.

State and, as a second best, he got passed section IX of the Paper Currency Act of 1861 by which *one-fourth* of the metallic reserve against note-issue might be held in *gold*.

The introduction of Paper Currency along these lines did not appreciably relieve monetary stringency. Sir Charles Trevelyan—the next Finance Member—again pressed for a gold currency. His idea was to make English and Australian sovereigns legal tender in India at the rate of £ 1 = Rs. 10, which was then the approximate market rate. The sovereigns would thus circulate in *addition* to the rupees. He expected that in course of time there would be sufficient gold in currency as well as in the Reserve to make possible the transition from a silver standard (based upon the rupee) to a gold standard (based upon sterling), with the rupee reduced to a token coin. But these proposals of Sir Charles Trevelyan (with which the Government of India were in agreement) were rejected by the Secretary of State who, as a concession to Indian demand, allowed gold coins to be accepted in payment of Government dues and notes to be issued in exchange for gold coins under Section IX of the Act of 1861. These concessions in the direction of introducing gold in Indian currency were embodied in two Notifications of 23 Nov. 1864.

As a result of these Notifications large quantities of sovereigns and half-sovereigns accumulated in Government Treasuries and in the Paper Currency Reserve, showing the possibility as well as the desirability of a gold currency for India. Perhaps the strongest case for a gold currency was made out by Sir Richard Temple—the Finance Member of the Indian Government at the

time—whose minute deserves to be read even at this distance of time. He concludes: "On the whole it seems clear that while in all other branches and departments of administration we endeavour to give to India the best of everything so far as we can, yet, in respect to metallic currency, we *deliberately* withhold from her the first-rate article and afford her a second rate one."

But the Secretary of State was as obdurate as ever. There was a slight change in the market ratio of gold and silver and the sovereign and half-sovereign had to be declared equivalent to Rs. 10-4-0 and Rs. 5-2-0 respectively. These inevitable difficulties of a 'Double Standard' were made a convenient excuse for the definitive rejection of a gold standard for India. In a laconic Resolution of May 1874 the Governor-General in Council declared "that he is not at present prepared to take any step for the recognition of gold as a legal standard of value in India."

1873—93: *Depreciation of Silver*—Hardly had the Government of India finally abandoned gold and cast in their lot with silver when their real difficulties began. They arose out of causes beyond their control. Since 1873 began the fall in the gold value of silver. Up to that year the relative values of gold and silver were comparatively stable. But since 1873, on the one hand the production of gold fell off and that of silver increased; on the other hand the demand for gold for currency purposes increased enormously when Germany, after her success in the Franco-German War, adopted a gold standard. The example of Germany was copied by one European country after another and even the Latin Union, whose action had contributed most to steady the ratio between gold and

silver, was obliged to suspend the free coinage of silver. Silver that was 'demonetized' in Germany and shut off from the countries of the Latin Union still further increased the available supplies of that metal and hence its steady depreciation. The price of silver per oz. was 60*d* in 1872 and it fell to about 29*d* in 1894.

With the depreciation of silver the problem of Indian currency and exchange assumes an international aspect. As there was free coinage of silver in India, every depreciation of silver meant a corresponding fall in the gold price of the rupee, that is, a fall in exchange. In 1872 one rupee was equivalent to approx. 22·7*d*; in 1894 it was equivalent to only 14·5*d* approx.

It is not necessary to dilate upon the disadvantages of a falling exchange. The Government of India were the direct sufferers and to the greatest amount. As they have to make large disbursements *in gold* in England every year on account of the 'Home charges', every fall in exchange meant an *increase* in the number of Rs. they had to raise in India to make the same payment in gold in England. This meant additional taxation. The Government of India had also to give 'compensation' to their civil and military servants on account of the falling exchange. Falling exchange meant not only additional taxation but the greatest uncertainty in the framing of the budget of the Government of India. It used to be said at that time that the budget was a gamble in rain, railways and the exchange.

Nor was the effect of the falling exchange less harmful to the trading community. No doubt the exporter of Indian produce got more rupees in India for the gold price he had obtained in London. To

that extent there would be a stimulation of exports. Conversely, the Indian importer of British manufactures would have to pay *more* rupees for the gold price in London. To that extent there would be a discouragement to imports. But this cannot last indefinitely. The additional rupees secured by the exporters must ultimately find their way in general currency, thus raising prices, discouraging exports and encouraging imports. Thus, though in *the long run* every change in exchange provides its own corrective, there is no denying the fact in the transitional period exporters or importers suffer (according as exchange *rises* or *falls*) and the undesirable element of speculation vitiates international trade.

We have said before that this period is of international significance. The continued depreciation of silver inflicted heavy losses upon the U. S. A. which is the biggest producer of silver. It was to the interest of the U. S. A., therefore, to arrest by any means the fall in the value of silver. The most feasible solution lay in the adoption of Bimetallism by international arrangement. This period is thus marked by continuous efforts on the part of the United States to bring about International Bimetallism by holding monetary Conferences. The Government of India also who had given up in 1874 all hope of introducing the gold standard in India saw in the possibility of International Bimetallism their only chance of escape from financial ruin. They were, therefore, whole-heartedly in favour of American efforts in that direction. But England would not give up her gold standard and the last Monetary Conference that was held at Brussels in 1892 threw up the scheme of Bimetallism in despair.

All this time the 'silver interests' in the United States were so powerful that they compelled the American Treasury to make heavy purchases of silver every month under the Bland Allison Act and, later on, the Sherman Act, with a view to checking the fall in the price of silver pending International agreement.

1893-1898: *Closing of the Mints*—When all these efforts came to nothing, there was a revival of the interest of the Government of India in that gold standard which had been abandoned in 1874. The Finance Member of the Government of India at this juncture was Sir David Barbour. He had profound knowledge of all monetary problems. He was a member of the Royal Commission on the Depression of Trade that had been appointed in England to examine the bearing of the depreciation of silver on trade. Unfortunately this Commission was equally divided on the question of Bimetallism though Sir David was one of those who favoured a Double Standard. When the last ray of hope of such a Standard was gone with the failure of the Brussels Conference in 1892, the Government of India addressed a despatch to the Secretary of State (Aug. 2, 1892) again pressing for the gold standard. "If Her Majesty's Government are not prepared to accept the proposals (of international bimetallism) which we have advocated for more than ten years as the best remedy for our difficulties, we consider that they ought not now to refuse to let us adopt the only other remedy open to us, namely the adoption of the same monetary standard as that of the country with which we have our most intimate financial and commercial relations, that standard being, as we understand, considered by Her Majesty's Government to have

worked so satisfactorily in England that they are not prepared to encourage any hope of a departure from it being approved by them."

The immediate measures proposed by Sir David Barbour for the adoption of the Gold Standard were the stoppage of the free coinage of silver to the public, and secondly, the opening of the mints to the free coinage of gold. These proposals were referred by the Secretary of State to a Committee presided over by Lord Herschell. The Committee agreed that though the mints should be closed to the coinage of silver to the *public*, Government should have the right of coining fresh rupees, or of issuing rupees in exchange for sovereigns (£1=Rs. 15). These recommendations were given effect to by three Notifications of June 26, 1893, by the first of which Government undertook to give rupees in exchange for gold (7·53344 grains of fine gold per rupee, *i. e.* at the rate of £1=Rs. 15); the second made sovereigns receivable at public treasuries at the same rate; the third Notification authorized the issue of notes against gold or sovereigns. It was also contemplated to open the mints to the free coinage of gold when suitable opportunity presented itself.

The heavy coinage of rupees that had been going on was suspended for five years. The resulting stringency led to a fall in prices and a rise in exchange. An important cause that contributed to the improvement of Indian exchange after 1896 was the general *rise* in world prices that began from 1896. In 1898 the Government of India made certain proposals for the establishment of the gold standard which were again referred by the Secretary of State to another Committee, this

time presided over by Sir Henry Fowler. This Committee "looking forward to the effective establishment in India of a gold standard and currency based on the principles of the free inflow and outflow of gold" recommended that (a) the Indian mints should continue closed to the unrestricted coinage of silver and should be opened to the unrestricted coinage of gold. (b) The sovereign should be made a legal tender and current coin. (c) The ratio between the sovereign and the rupee should be £1 = Rs. 15, or Re. 1 = Is. 4d. (d) No legal obligation to give gold for rupees for merely internal purposes should be accepted, but (e) the profit on the coinage of rupees should be held in gold as a special reserve and made freely available for foreign remittances whenever exchange fell below gold specie point. (f) Government should continue to give rupees for gold but fresh rupees should not be coined until the proportion of gold in the currency was found to exceed the requirements of the public. All these recommendations were accepted by the Secretary of State.

(3) THE GOLD EXCHANGE STANDARD—We have now reached an important landmark in the history of Indian Currency. The Fowler Committee contemplated the introduction of the gold standard and gold currency in India. But since 1899 the Government of India 'drifted' into a monetary standard which has been called "The Gold-Exchange Standard." The second chapter of Prof. J. M. Keynes' *Indian Currency and Finance* has now become classical. Therein Prof. Keynes showed that the development of Indian currency along this direction was not only not anomalous, but in keeping with the practices adopted by the Governments or Central Banks of those

countries which are debtor countries. Such Banks hold large stocks of foreign bills that are made available for foreign remittances. They cannot as effectively control their Money Market by a 'Bank Rate Policy' as the Bank of England is able to do. "In countries where the Money Market is neither so highly developed nor, in relation to foreign countries, so self-supporting, the Central Bank, if it is to be secure, must take the matter in hand itself and by itself entering the international money market as a lender at short notice, place itself in funds, at foreign centres, which can be rapidly withdrawn when they are required. The only alternative would be the holding of a much larger reserve of gold, the expense of which would be nearly intolerable. The new method combines safety with economy."* Prof. Keynes gives the following description of the Gold-Exchange Standard. "The Gold-Exchange Standard arises out of the discovery that, so long as gold is available for payments of *international* indebtedness at an approximately constant rate in terms of the national currency, it is a matter of comparative indifference whether it actually *forms* the national currency.

"The Gold-Exchange Standard may be said to exist in a country when gold does not circulate in a country to an appreciable extent, when the local currency is not necessarily redeemable in gold, but when the Government or Central Bank makes arrangement for the provision of foreign remittances in gold at a fixed maximum rate in terms of the local currency, the reserves necessary to provide these remittances being kept to a considerable extent abroad."†

* J. M. Keynes: *Indian Currency and Finance*, pp. 25-26. on p. 340.

† *Ibid*: pp. 30-31.

The gold-exchange standard is an admirable mechanism for effecting economy of gold in making foreign remittances and is suitable to *debtor* countries. Now in the case of India, for nine years out of ten she has a favourable balance of trade. She should have no difficulty in sending out gold in an *occasional adverse* year if in favourable years the flow of gold was not impeded. But there is always a *potential* demand for remittance, on account of political and economic causes and that is why Indian Currency as it evolved after 1899 came to possess all the characteristics of a gold-exchange standard. The local currency consisted of rupees or notes: so long as the Notification of 1893 was not withdrawn, Government was bound to give 15 rupees in exchange for £ 1. This provision prevented the sterling value of the rupee from *rising* above 1s. 4d. by more than the cost of remitting sovereigns to India, say, above 1s. 4½d. Government also undertook to sell, in return for rupees tendered in India, bills payable in London in Sterling at a rate not more unfavourable than 1s. 3½d. per rupee. This prevented the sterling value of the rupee from *falling* below 1s. 3½d. Thus the extreme limits of variation of the sterling value of the rupee were 1s. 4½d. and 1s. 3½d. The Indian Government having undertaken to exchange local currency for international currency *viz.* sterling, and *vice versa*, must maintain two kinds of Reserves, one for each of these purposes.

Let us then consider how these Reserves were built up and manipulated to maintain the exchange at 1s. 4d. We must first of all take stock of all the available resources of the Indian Government, in India and in London. First there are the balances held by the Government of India in the Treasuries and

by the India Office with the Bank of England. A Paper Currency Reserve had been built up to support the currency notes and another Reserve—the Gold Reserve—had arisen out of the profits on coinage as suggested by the Fowler Committee. The proper relation between these Reserves and the balances was realized only after considerable experience had been obtained of the Indian currency system. The Chamberlain Commission makes it clear that “the first principle to be borne in mind in any consideration of the Indian finance and currency system is that the balances of the Government of India in India, and of the India Office in London, and the portions of the Gold Standard and Paper Currency Reserves located respectively in India and in London, all represent in the last analysis one single fund. The titles attached to the constituent portions of this fund indicate to some extent the nature of the needs and liabilities for which the fund as a whole is required to provide. The name attached to each portion indicates the primary function of that portion; but neither in theory nor in practice have the separate portions of the fund been entirely reserved for the objects indicated by their separate names.

“The needs and liabilities for which these resources are required to provide may be summarised under the following five heads:—(i) A working balance in India for the current expenditure on revenue and capital account of the Imperial and Provincial Governments throughout India, the expenditure of the local boards and municipalities, the Government savings banks and for other miscellaneous funds. (ii) A working balance in

the United Kingdom for the 'home charges' of the Government of India on revenue and capital account, including the capital outlay of most of the Indian railway systems. (iii) A reserve fund for the maintenance, at the par of 1s. 4d. per rupee, of the exchange value of the rupee with the sovereign. (iv) A fund for securing the convertibility of the notes of the Government of India. (v) The provision in India of fresh supplies of coined rupees and of sovereigns. ”*

We shall first of all consider the question of the *Balances*. This has reference to the *amount* and *location* of the Balances as well as to the method by which their distribution between London and India was arranged, *i.e.* to the system of Council Drafts.

Now, before the War, the *minimum* working balance required in London was put down at £4 millions; that required in India was put down at £12 millions. These figures were adopted as a result of experience. As a matter of fact far larger balances than were necessary were held. Thus between 1910 to 1913, the aggregate balances ranged between £25 to £30 millions, the tendency being towards holding all available surplus funds in London. The Chamberlain Commission† justified these heavy balances on the ground of uncertainty that always attached to the framing of the budgets of the Government of India.

Consider first the balances *held in India*. These balances were divided (a) between some 270 district treasuries and 1500 sub-treasuries; (b) 36 branches

* *Of. Chamberlain Com. Report* : paras 9 & 10.

† *Of. Its Report* : paras 126-29.

of the Presidency Banks; (c) the three head-offices of these Banks at Calcutta, Bombay and Madras and (d) the Reserve Treasuries at the last three places. It is not necessary to go into the history of this financial organization; but it is important to understand the bearing of the independent Treasury System upon the Indian Money Market. In the United Kingdom public revenue as it accrues is paid into the Bank of England and it is thus available to finance the commerce of the country; and whenever Government want funds in the lean months they borrow them in the money market by means of Treasury Bills. By both these means a sort of equilibrium is maintained, in England, in the demands of the Exchequer upon the cash supplies of the nation.

It is otherwise in India. The revenues as they accumulate in the Treasuries do not at once find their way to the money market. It, on the contrary, happens that the period of maximum collection of revenue (December to March) is precisely the very period when money is urgently wanted to finance the agricultural crops. "Thus it happens that, at the time when market stands most in need of funds, the Government are taking off the market a sum of 6 or 7 crores not for the sake of immediate requirements but in order to meet disbursements during the slack season of the summer and autumn."*

The Chamberlain Commission found fault with this financial organization. It was not prepared to recommend the abolition of the Reserve Treasuries

* *Chamberlain Com. Report*: para 138.

and the transfer of funds held therein to the Presidency Banks. But it did recommend that Government should make temporary loans to the Presidency Banks in times of monetary stringency. Not only will such loans earn interest, but they will also enable Government to borrow money in the same money market later on when the public Treasuries are depleted.

Let us next consider the method of effecting remittances on Government account between India and London, *viz.*, the *system of sales of Council drafts*. Sales of Council bills and telegraphic transfers on India by the Secretary of State in London are the central feature of the machinery by which the Indian currency and finance system is managed and its working should be properly understood. The Secretary of State inherited this practice of drawing funds from India to London from the East India Company. Up to 1893 the sales were limited more or less to the requirements of the Secretary of State. Since then they have been used as the most convenient means of liquidating the favourable balance of Indian trade and thus diverting as much gold as possible from India, and also of regulating the exchange. (1) Thus by a temporary suspension of these sales efforts were made to *raise* the exchange value of the rupee. (2) Sales were resorted to for the issue of Notes in India against the tender of gold in London as a part of the Paper Currency Reserve. (3) As Government had undertaken to give Rs. 15 for each sovereign in India, sovereigns used to be sent to India. They had to be sent back to London for the purchase of silver required for the additional coinage. To avoid the double shipment of sovereigns, the Secretary of State made a standing offer to sell

Council bills *without limit* of amount at 1s. 4½d. per rupee.

(4) Similarly council bills were sold against gold on its way from Australia or Africa to India, which was then diverted to London.

The pre-War practice of these sales was this : on each Wednesday the Secretary of State invited tenders for bills of exchange and telegraphic transfers on the Indian Government authorities at Calcutta, Bombay and Madras. The lowest price was 1s. 3¾d. per rupee for bills and 1s. 3½d. for transfers. Bills and telegraphic transfers were sold on other days of the week also, at a slightly higher rate, and then they were called 'intermediate' or 'special' bills or transfers.

This practice greatly extended the original scope of the sale of Council bills. "It will be seen that the considerations affecting the council drafts are now very much wider than the mere question of laying down in London the funds required for ordinary home charges. The transfer to London from the Government of India's balances of some £20 millions annually for the home charges on revenue account, and of some £6 millions or more to meet capital expenditure remains the chief function of the sales of Council drafts; but if the expense and waste involved in the shipment of sovereigns from India to London on Government account is to be avoided, it is necessary for the Secretary of State to sell sufficient drafts, not merely to meet his own requirements on revenue and capital account, but also to satisfy the demands of trade up to such an amount as will enable the balance of trade in India's favour over and above the amount of the home charges on revenue and capital account to be settled without the export to India on private account of more gold than is actually required in India for absorption

by the public.”*

The Chamberlain Commission was not prepared to prescribe any limits to the amounts of such sales, or to the rates at which they were made.

Turning finally to the question of the *Balances held in London*, we have already seen that the minimum was £4 millions. As a matter of fact, however, much larger sums were held. Of these only half a million pounds were held with the Bank of England as a working balance. The rest was placed on ‘short-term loans’ (for six weeks at a time) with “Approved Borrowers.” The Secretary of State had a broker who arranged for these loans. Loans were frequently renewed. The Chamberlain Commission was satisfied with this arrangement though it suggested that the list of ‘approved borrowers’ might be enlarged, and so also the range of securities against which loans were made. Criticism from the Indian point of view is obvious. The whole practice amounted to the withdrawal of large funds from India and their distribution, at low rates of interest, among those who had access to the India Office.

We have seen before that the essence of the Gold-Exchange Standard lies in the ability of the currency authority to convert so much of the internal currency as may at any moment be required for the settlement of external obligations into gold or sterling. We are now considering the resources available for this purpose. We may leave aside the balances held in London for they were required for current purposes. The resources available for the maintenance of the exchange consisted of the Gold-Standard Reserve and that part of the Paper Currency Reserve that was held

* *Chamberlain Commission Report* : para 176.

in gold or gold securities. Let us turn to these two Reserves.

The Gold Standard Reserve—The profits on the coinage of rupees served as the nucleus of this Reserve. The original idea was to keep this Reserve *in gold and in India*. But the Secretary of State decided that the Reserve should be remitted to *London and invested* in securities. "It was held that since London was the place in which the Reserve would have to be applied on the occasion of the emergency against which it was being created, London would be the best place in which to keep it."*

The 'Gold Reserve' was thus kept in London. In 1906 a part of this Reserve was kept *in India* in the form of coined *Rupees*. The name of the Reserve was then changed into "The Gold Standard Reserve." The new arrangement was justified on the following ground: "The fact that this Reserve was needed in order to prevent the possibility of the exchange value of the rupee going to a premium over *Is. 4d.* through a failure in the supply (of rupees) suggested that its cost might be charged against the Gold Reserve by the simple process of holding the profits on the coinage of rupees in the Reserve in the form of *Rs.* in India instead of converting them into sterling held in London".† As the Reserve went on accumulating and no occasion arose of using it (the exchange remaining steady) half the profits on coinage were diverted to capital expenditure on railways, on the advice of a Committee appointed in 1907.

It was the crisis of 1907-08 that put the Gold Exchange Standard to its first trial. Early in that year

* *Chamberlain Com. Report* : para 27.

† *Cham. Commission Report* : para 30.

there was a financial crisis in America, and later on there was a partial failure of the monsoon in India. This caused weakness in exchange in November. It was as low as 1s. 3 $\frac{3}{4}$ d. on 23rd Nov. There was considerable hesitation as to what should be done to support exchange. Gold or Telegraphic transfers on London were not immediately offered. It was not before March 1908 that weekly sales of 'reverse' councils were made at the rate of 1s. 3 $\frac{9}{16}$ d. per rupee. The sales continued right up to September when the exchange recovered. In all £8 millions were withdrawn from the Gold Standard Reserve to meet the Reverse Councils.

Pertinent questions as to the ultimate magnitude and composition of the Reserve were raised as soon as the crisis of 1907-08 was over. As for the *magnitude*, it was said that it depended not so much upon the amount of rupees in circulation in India "but upon the growth of India's external trade and the extent of the deficiency which adverse seasons or circumstances may at any time be reasonably expected to produce in the country's power to liquidate immediately its foreign obligations."* The Chamberlain Commission thought that even a Reserve of £ 25 millions might prove insufficient.

As for the *composition* of the Reserve the practice of investing the Reserve in securities involved considerable inconvenience and loss in the crisis of 1907-08. The Chamberlain Commission recommended that at least *half* of the Reserve should be held in *gold*, and that though a part might be invested in securities, the latter must be quickly realizable.

* *Chamberlain Com. Report* : para 80.

A review of the history of the Gold Standard Reserve prior to the War leads one to the conclusion that the Secretary of State was more anxious to earn interest on the Reserve than to keep it in a form ready for immediate use. The Government of India seemed to have a better appreciation of the bearing of such a Reserve upon the maintenance of the exchange than the Secretary of State had, for they always protested against the latter's "hankering after interest."

We now turn to the other Reserve available for the support of exchange, as a second line of defence: we mean *The Paper Currency Reserve*. The Government Paper Currency system of India dates from 1862 in which year the previously existing notes of the Presidency Banks, which had only a restricted circulation, were withdrawn and a Government monopoly of Note-issue was established. The notes were in the form of promissory notes of the Government of India, payable in rupees to bearer on demand, and are issued in denominations of 5, 10, 50, 100, 500, 1000, and 10,000 Rs. At first these notes were encashable only within the 'circle' to which they belonged. But now they are encashable anywhere in the country. The Notes were issued on the principle of the Bank Charter Act of 1844. But the original fiduciary limit of 4 crores was successively raised to 14 crores, of which a maximum of 4 crores was held in Sterling Securities.

An idea of the note-circulation and the composition of the Reserve before the War can be gathered

from the following table. The figures stood as shown on 31st March 1913. They are in crores of Rs.

Total circulation	Silver in India	Gold in India	Gold in London	Securities	
				Sterling	Rupees
68.97	16.45	29.37	9.15	4.00	10.00

But we have already seen that though the primary object of the Paper Currency Reserve is to secure the convertibility of the Notes, the Reserve has been utilized as part of the machinery for the maintenance of the exchange—(1) Thus since 1898 it was arranged to issue notes in India against the tender of gold in London, which was set aside as part of the Paper Currency Reserve. (2) In 1905 £ 5 million sovereigns were shipped from India to London to be kept there as part of the Paper Currency Reserve. On account of the favourable balances of trade there was a keen demand for rupees and Government had difficulty in meeting it. "The advantage of shipping the sovereigns to London and keeping them there was that they could be used there, as and when required, in purchasing silver, thus saving the three or four weeks' delay involved in shipping them from India at the moment when actually required."*

The gold held in the London branch of the Paper Currency Reserve came to be used for the purchase of silver for the coinage of rupees. Thus when the demand for rupees (to meet the council drafts) was so strong that it could not be met from the Treasury balances, rupees were withdrawn from the Paper Currency

* *Chamberlain Com. Report* : para 29.

Reserve in India against a corresponding deposit of gold in the Paper Currency Reserve in London. In the meantime silver was purchased in London and shipped to India for being coined into rupees. Holding part of the gold of the Paper Currency Reserve in London was justified on the ground that it was wanted to strengthen the Gold Standard Reserve. It was contended that gold in India in the Paper Currency Reserve was in excess of the requirement. "The Gold in the Gold Standard Reserve has not in itself been sufficient to secure beyond question the stability of exchange, and gold in London is more directly and indubitably effective for this purpose than gold in India. In these circumstances, so long as the Gold Standard Reserve is insufficient by itself for the support of exchange, we think the policy (of holding part of the Paper Currency Reserve in *gold in London*) is justified."*

We have now passed under review the resources available for the support of the exchange: the Gold Standard Reserve, the Gold portion of the Paper Currency Reserve, and to a small extent, the balances held by the Secretary of State in London. These three together constituted the *gold* resources. Their use arose whenever exchange weakened. Then the Government of India were to sell 'reverse councils' in India and the Secretary of State was to meet these drafts from the gold resources shown above.

So long as the demand for remittances to India was strong the Secretary of State would be able to sell council drafts on the Government of India.

* *Chamberlain Com. Report* : para 108.

Fresh rupees had to be coined to meet these drafts. So that just as we have *gold* resources at the *English* end of the Gold Exchange Standard, we have *silver* resources at the *Indian* end: the latter being silver in the Mints and in the Paper Currency Reserve, Rupees in the Paper Currency Reserve and finally, rupees in the balances of the Government of India, scattered over the whole country in the treasuries and branches of the Presidency Banks, as has been already described.

(4) INDIAN CURRENCY DURING AND AFTER THE WAR UP TO 1920. Hardly had the Chamberlain Commission pronounced its benediction upon the Indian Currency system and practice when the latter were subjected to the strain of the Great War. Reference has been already made to the effects of the War upon India's external trade (Chapter IV). There was a contraction of imports but, as the War protracted, a steady demand for Indian exports. At the same time heavy disbursements had to be made in India on behalf of H. M. Government for carrying on the War in Mesopotamia, Persia and East Africa. The demand for remittances to India was keenest at the very moment when the alternative method of liquidating the favourable balance, *viz.* the shipment of gold and silver could not be adopted to any appreciable extent. In the five-year period 1909-1914 gold and silver (both coin and bullion) had been imported to the tune of £ 120·2 millions. The value of the precious metals imported in the next five-year period 1914-1919 was just 36 million £s. Gold could be obtained with the greatest difficulty because restrictions were imposed upon its export. As for silver, there was a reduction in the supply, and a

simultaneous increase in demand for currency purposes throughout the world. Thus when the normal flow of the precious metals to India was seriously curtailed during the War, the burden of liquidating the favourable balances was focussed upon the Government of India and took the form of a heavy demand for currency. It is this feature that proved more embarrassing than the weakening of the exchange. The latter difficulty arose between August 1914 to January 1915, in 1915-16 and again between November 1918 and April 1919. In all these three intervals reverse councils were sold of the aggregate value of 19 million £s. Except for these temporary intervals exchange remained strong throughout the War.

Not the weakening of the exchange but difficulty in the purchase of silver, therefore, is the outstanding feature of our currency and exchange position in the War years 1917-1919. "Between April 1916 and March 1919 over 300 million standard ounces of silver were bought in the market for coinage in addition to 200 million fine ounces of silver purchased from America under the Pittman Act, as compared with about 180 standard ounces between April 1904 and March 1907, when the Indian demand (for silver) was specially heavy and continuous." *

These feverish purchases of silver sent up its price. "In 1915 the highest price of silver in the London market was $27\frac{1}{2}d.$ per standard ounce. By April 1916 it had risen to $35\frac{1}{2}d.$ and in December had reached $37d.$ The rise in price continued throughout the first part of 1917 and in August it exceeded $43d.$

* *Babington-Smith Committee Report* : para 17.

We invite attention to this figure, because it marks the point at which the exchange value of the rupee at 1s. 4d. is equivalent to its bullion value, and it was the rise in the price of silver to this figure and above it that necessitated alterations in exchange."* This phenomenal rise in silver led to its control by the United States which imposed restrictions upon its export. These measures kept the price between 40d. to 50d. per oz. since October 1917 to April 1919. "But when in May 1919 the United States Government and the British Government withdrew control over the silver market, a further rise in price occurred, and in May the London price reached 58d, or more than double the maximum attained in 1915. Since that date, mainly on account of the exceptional demand from China, the price rose still further and on Dec. 17 the price stood at 78d. per oz."† We must take into account another factor that raised the sterling price of silver at this time. The control over dollar-sterling exchange was withdrawn on 20th March 1919 and as a result the sterling began to depreciate. On 17th December the £ was equivalent to \$ 3.83 as against its par value of \$ 4.866. A fall in sterling, therefore, had the effect of raising the London quotation for silver.

We have seen that at the price of 43d. per oz. the bullion of the rupee becomes equal to the exchange value of 1s. 4d. The Secretary of State cannot sell Council drafts at this rate and pay Rs. in India unless he is prepared to bear heavy losses on the coinage of Rs. Not only this, but the existing stock of Rs.

* *Babington-Smith Com. Report*: para 18.

† *Babington-Smith Com. Report*: p. 18.

is endangered by a rise in the price of silver above 43*d.* per oz. because then the rupees become *more* valuable as *bullion* than as *coin*. Since August 1917, therefore, the exchange was successively raised, mainly in sympathy with the rise in the price of silver. The changes are shown in the margin.*

	Minimum rate for immediate telegraphic transfers		Minimum rate for immediate telegraphic transfers
	<i>s.</i> <i>d.</i>		<i>s.</i> <i>d.</i>
3rd. Jan. 1917	1—4½	12th Aug. 1919	1—10
28 Aug. „	1—5	15th Sep. „	2— 0
12 April 1918	1—6	22nd Nov. „	2— 2
13 May 1919	1—8	12th Dec. „	2— 4

In view of the possibility of the price of silver remaining high, and in view of the necessity of protecting the silver currency of the country, and also on account of its inclination in favour of a high rate of exchange (about which more will be said later on) the Babington-Smith Committee recommended that the rate should be fixed at 2*s. gold*. “We believe that, if the exchange value of the rupee is fixed at a figure not lower than this, there is substantial ground for holding that the rupee can be established as a token coin, and the maintenance of a satisfactory monetary circulation in India assured.”†

It will be noted that the rate is 2*s. gold*, and not 2*s. Sterling*. This is so because the sterling had depreciated at that time and on the whole the

* *Babington-Smith Com. Report* : para 22.

† *Babington-Smith Com. Report* : para 43.

Babington-Smith Committee was satisfied that advantage lay in linking the rupee with *gold* and not with depreciated and depreciating *sterling*.

Only a brief reference is necessary to the other measures adopted by the Government of India regarding currency and exchange, to meet the War-situation.

(a) *Control of exchange*: In view of difficulties of coining rupees the offer of unlimited sales of Council Drafts was withdrawn, and from 20th Dec. 1916 limited amounts were made available for sale, the rates were fixed, and other minor conditions were imposed. The control practically came to a close when restrictions upon the export of gold were removed in July 1919 and thus an alternative means of remittance was available. (b) Measures were also taken for the *conservation and economy of silver*. Thus from 3rd Sep. 1917 the export of silver coin and bullion from India was prohibited. Melting of coins was made an offence. Again 2½ Rs. and 1 Re. notes were introduced, and nickel coins were introduced for the 2-anna, 4-anna and 8-anna silver pieces. (c) *Acquisition and use of gold*. The currency was temporarily augmented by the issue of sovereigns and by the coinage, at the Royal Mint, Bombay, more than 2 million gold mohurs and more than a million and quarter of sovereigns. Some gold was also secured from Canada and the United States. (d) *Increase in Note-issue*. Successful efforts were made to increase the circulation of Notes. The gross circulation was only 66.12 crores on 31st March 1914; it was 153.46 on 31st March 1919. This required a corresponding increase in the fiduciary minimum. This minimum was limited to 14 crores of Rs. before the War. Since the beginning of Nov. 1915 the legal limit of the invested

portion was modified nine times and stood at 120 crores in Nov. 1919.

Not much need be said about the other suggestions of the Babington-Smith Committee which, by its terms of reference, was confined to a narrow issue: "ensuring a stable gold exchange standard." The Gold exchange standard, therefore, was still the accepted basis of the monetary policy of the Secretary of State and the Committee was not authorized to question that basis. Its suggestions, therefore, with regard to the composition and location of the Gold Standard Reserve and Paper Currency Reserve, the sale of council drafts and reverse councils, etc. indicated minor improvements than any radical changes.

(5) INDIAN CURRENCY SINCE 1920: The history of Indian currency subsequent to the publication of the Babington-Smith Committee Report in February 1920 can be easily summarised. The recommendations of the Committee were, of course, accepted and the ratio of 2s. gold was placed on the statute-book and sovereigns were declared legal tender at the rate of Rs. 10 each. But the economic conditions of the year 1919-20 were abnormal. The post-war boom was coming to a sudden close. Both the Bank of England and the United States went in for a policy of currency deflation. The Bank of England discount rate was raised to 6 p. c. in Nov. 1919 and to 7 p. c. in April 1920. This brought down world prices from the Index No. of 295 in 1920 (*Statist Figure*) to 182 in 1921. Indian exports declined from 330 crores in 1919-20 to 258 crores in 1920-21. The imports increased from 208 crores to 336 crores in the same period. The exchange could not be maintained at 2s. gold which at that time

meant nearly 3s. sterling. Advantage was taken of the high exchange by the European community to remit to England the great profits which it had made in India during the War. Steps were at once taken to maintain the new ratio by the offer of reverse councils at a rate which allowed for the depreciation of the sterling as shown by the dollar-sterling exchange. "The rates for reverse councils offered by the Government thus varied from 2s. $3\frac{2}{3}d.$ to 2s. $10\frac{2}{3}d.$ (sterling). Later on when the attempt to hold the exchange at 2s. *gold* failed, efforts were made to hold it at 2s. *sterling*. But these also failed. During the whole of this period reverse councils to the extent of £ 55·532 millions were sold (in 1919-20-21). All attempts to hold the exchange at any ratio were then abandoned and early in 1921 exchange fell below the level of 1s. $3d.$ sterling and 1s. *gold*.

Government then turned its attention to improve the financial position as a preliminary to the restoration of the exchange. Successful efforts were made to balance the budget in 1923-24 and to reduce the floating debt. This paved the way for the contraction of currency—which was done to the extent of 38 crores in the three years 1920-23. This policy of deflation had its necessary effect upon the money market, for the Imperial Bank rate of discount went to 9 p. c. from Feb. to April 1924. During this period of 1920-1923 the sales of Council drafts were entirely suspended, and the Secretary of State kept himself in funds by recovering from the Imperial Government in respect of expenditure incurred by the Government of India, and by loans.

The exchange soon began to rise and in Sep. 1924 it was about 1s. $5\frac{1}{4}d.$ and in Oct. 1s. $6\frac{1}{4}d.$ = 1s. $4\frac{3}{4}d.$ *gold*.

"The position indicated by this sharp upward movement in the exchange formed the subject of anxious consideration between the Government of India and the Secretary of State, as the result of which it was decided that, without making any public announcement of policy, efforts should be made to prevent exchange from breaking away materially above 1s. 6d. for the time being, any tendency of exchange to rise appreciably above this figure being counteracted by free offerings of rupees. In pursuance of this policy, remittances from India to the Home Treasury were effected in the latter part of 1924-25 by the purchase of sterling in India and the sale of council drafts in London at rates varying between 1s. 5 $\frac{13}{16}$ d, and 1s. 6 $\frac{5}{16}$ d, per rupee."*

Meanwhile sterling was restored to parity with gold about the middle of 1925, and since then it has remained in the neighbourhood of 1s. 6d. In August 1925 the Hilton Young Commission was appointed.

* *Appendix 69 to the Report of Hilton Young Com* Memorandum on Currency History since 1920.

CHAPTER XV

RECONSTRUCTION OF INTERNAL CURRENCY

(I) GOLD CURRENCY DISAPPROVED :—We have reviewed in the last chapter the history of Indian currency without being very controversial about it. It is time now to consider the various problems of Indian Currency and Exchange in the light of the principles laid down by the latest Royal Commission. We shall first take the problems of internal currency. At present it consists of rupees and their fractional coins, currency notes and bank-money in the form of cheques. The first question that at once arises is this: Is there going to be any room for *gold* in our currency? There has been an insistent demand in India for a gold currency together with a gold standard ever since both these were declared to be the objective of Indian currency policy by the Fowler Committee in 1898. But some how the gold currency is being withheld from us. The arguments for and against a gold currency were exhaustively considered by the Chamberlain Commission.* In favour of gold currency it was urged that (a) it is more convenient and portable, (b) gold in circulation is available for supporting the exchange, and (c) it will protect the country from an 'artificial and managed' currency. Let us examine these arguments in the order given.

(a) Gold currency does possess the advantage of convenience and portability. But so does paper

* *Of. Chamberlain Com. Report* : paras 56-76.

currency in the form of Notes or Cheques. Before the War much gold was used as currency in European countries but since then all that gold has disappeared from circulation and found its way to the Reserves of the Central Banks. In the monetary reconstruction that is taking place in Europe since then, even when the gold *standard* is re-adopted the gold *currency* is not being re-introduced. Indeed it is now conceded that a gold currency is of the nature of an expensive and dispensable feature of the gold standard and not an essential concomitant of it. (b) Gold in circulation is not as effectively useful in supporting exchange as gold in bank-reserves. In the pre-war days England or Germany was able to support exchange not because gold was in extensive or active circulation, but because of the reserves held in its Central Bank and of the policy of discount rate that each followed. "It is useless to suppose that the advantages of the existing (English) monetary system can be obtained for India by imitating what is, perhaps, the least vital part of this system, namely, the use of sovereigns for that small class of payments which are made in actual cash, while ignoring the nature of the complex banking and financial system upon which the stability of exchange really rests."* It is also clear that gold must circulate in *substantial* amounts if its use for exchange purposes is to be appreciable. But the circulation of gold can increase at the expense of either *rupees* or *notes* or of both. Should the demand for *rupees* fall off, the Gold Standard Reserve will

* *Chamberlain Com. Report* : para 61.

weaken; should the demand for *notes* fall off (and experience shows that gold is a more powerful competitor to notes than to rupees) the Paper Currency Reserve must suffer. Thus we see that every increase in the circulation of gold must take place at the expense of one or the other Reserve, and as gold in circulation is not as effective for exchange purposes as gold in reserve, the remedy for our currency troubles must be found in other directions and not in a greater circulation of gold. (c) It is finally said that a gold currency will save us from a 'managed' currency. The Chamberlain Commission denied that the Indian Currency system was 'managed' in the sense that Government manipulated it to put more rupees in circulation than are needed. It saw no essential difference between the English system in which any one has the right of converting gold into sovereigns and the Indian system in which any one has the power of importing sovereigns into the country. "The only point of the criticism that India's currency system is managed in a sense that is not true of the currency of the United Kingdom lies in the fact that the rupee is a token passing at a value above its intrinsic value and at the same time is unlimited legal tender. It is true that it is not practicable even to consider the limitation of the amount for which the rupee is legal tender. In this sense, therefore, the system must remain a managed one. But we demur altogether to the idea that because it is to this extent a managed system it must be a bad system. It is not, in fact, possible for the Government of India to manipulate the currency for their own ends, and they cannot add to the active circulation of the currency except in

response to public demands.”*

Now we have already seen how the actual working of the Gold-exchange Standard resulted in diverting gold from India and foisting upon her a cheap and redundant currency. As will be shown later on no problem has proved more embarrassing or placed a greater obstacle in the reform of Indian currency than the one arising out of an enormous rupee coinage. The policy of preventing the people from having as much of the world's gold as they had a claim to, and the subterfuges by which their substantial claims were satisfied by the cheap substitutes of silver have destroyed the confidence of the public in the present currency policy of the Government. This has also intensified the habit of hoarding gold, as has been shown before. Sir James Begbie put his finger on the weakest spot in the Indian currency when in his minute of dissent to the Report of the Chamberlain Commission he referred to the effect of an extensive token currency upon the hoarding habit. After alluding to the heavy Indian demand for sovereigns and gold bullion Sir James said: “This demand for gold coin, accompanied as it has been by increased demand for gold bullion, dominates the whole currency situation. For a country which takes gold in great quantities an extensive token currency is most unsuitable. It has the usual effect of driving gold out of circulation. It has the still greater disadvantage that it keeps the gold out of useful employment. People who value gold so highly as to store and hold it to the extent witnessed in India are not likely to invest or make other profitable use of it, so long as they have to

* *Chamberlain Commission Report* : para 66.

take the risk of being repaid in token coins when they realize their investments. The token currency not only prevents the holders of the gold from utilising it to some advantage, but the country as a whole loses the benefit that should accrue to it from the possession of great wealth.”* The only way by which the people will be induced to use their stored-up gold was to make gold a more prominent feature of the currency and to add token currency to the currency less freely. “Capital is proverbially timid and nowhere more so than in India. If, therefore, the gold held in India is to be attracted into useful employment it can, I think, be done only by providing security that when it is invested the investments will continue to represent gold, and be convertible into gold, by means of a gold currency policy in which the public will have confidence.”†

But in spite of such authoritative views of Englishmen familiar with Indian monetary conditions, in spite of the repeated demand of Indians, indeed in spite of the support which the Indian Government has consistently given to the Indian demand, the Secretary of State for India and the Lords of the Treasury of His Majesty have proved adamant. The Indian mints were prevented from minting sovereigns on paltry and technical grounds and thus the free inflow and outflow of gold did not operate as an automatic factor and hence the suspicion and charge that the Indian currency was a ‘managed’ one.

In approaching the question of gold currency

* *Sir James' dissenting minute to the Chamberlain Com. Report*: para 6.

† para. 11.

as an item in monetary reconstruction after the War we must properly appreciate the bearing of the supplies of gold on world price and on economic progress generally. If the supply of gold falls short of the world-demand, prices will fall and economic activity will be depressed. The War drove most of the world's gold to America and it is now being doled out to the different European countries and to Asia. This points to the importance of economy of gold for monetary purposes. As Prof. Gustav Cassel says: "Since the very beginning of the after-War reconstruction I have regarded this economy in the monetary use of gold as an essential element in the whole work of reconstruction. This view has been shared by leading authorities. It found official expression first in the resolution of the Genoa Conference, which recommended that a certain economy in the use of gold should be aimed at by the concentration of the reserves of note-issuing banks. The extension of this economy to the use of gold as a circulating medium was at that time not possible to get incorporated in the resolutions. When, however, in April 1925 Great Britain returned to the gold standard, the idea had ripened that, owing to the scarcity of the world's gold supply, it was necessary to refrain from bringing gold coins into circulation. Mr. Churchill's gold standard retained only the very kernel of the gold standard, *viz.* the maintenance of the currency within the neighbourhood of a constant parity with gold. This is the model for the currency system of the future. The programme should be: no gold in circulation and the greatest possible concentration of gold reserves, not only within every nation, but also internationally. This limitation of the demand for gold is to the common

interest of all nations, in as much as every one of them is interested in the highest possible stability of the purchasing power of its money and in preventing any growth of the real burden of its public debt.”*

In the light of these general principles Prof. Gustav Cassel deprecated any scheme for a gold currency for India. Such a scheme would require *more* gold when it is put into practice than the amount calculated before its introduction, and this diversion of the worlds’ gold would, to that extent, bring down prices. Again the introduction of the gold currency and the demonetization of the rupee would *depress* the value of silver and this would be a great hardship to those who have hoarded their wealth in the form of silver. The depreciation of silver will give rise to an *additional* demand for gold to replace the silver hoards by gold hoards. It is also likely that Asiatic countries that are in intimate commercial relations with India will begin to replenish themselves with gold coins from the currency of India. This would have very far-reaching consequences on the world’s demand for gold. In view of the uncertainty of the future production of gold, of the course of world prices, and of the uncertain *cost* of any practical scheme for gold currency, Prof. Gustav Cassel was opposed to the introduction of a gold currency for India. The same view has been held by the Royal Commission. It also believes that the scheme of a gold currency prepared by the Indian Finance Department *under-estimates* the demand for gold. We may summarise its arguments against a gold currency as follows: “There can be no doubt that a large extra demand from India would

* *Appendix 92 to the Report of Hilton Young Com.* Evidence of Prof. Gustav Cassel.

cause increased competition for gold among the countries of the world and lead to a substantial fall in gold prices and a substantial curtailment of credit. In their reaction on India as one unit in the world's trade system, a fall in gold prices and a curtailment of credit would on balance be unfavourable."* Again, the introduction of the gold currency in India would adversely affect the position of silver in many ways. The Indian demand for silver for coinage purposes at any rate would abate and thus the price of silver would fall. If other countries, *e.g.* China were to follow India in currency reform the fall in the price of silver will be accentuated. This depreciation of silver must adversely affect all those who hold large quantities of silver as store of value in India. Again the United States of America—which is the largest producer of silver—is not likely to countenance any scheme of a gold currency for India which would have the necessary effect of bringing down the price of silver. And if the United States be hostile it will be impossible to give effect to any such scheme, so dominating is the position of the United States in the world's market of gold and silver at the present moment. For all these *practical* reasons, therefore, the Hilton Young Commission was opposed to a gold currency for India. If the object of the gold currency is to inspire public confidence and to secure an automatic working of the currency, that object can be equally well achieved by the introduction of a gold *standard without* a gold currency. "The mere act of "putting gold into circulation," the Commission said,†

* *Hilton Young Com. Report* : para 37.

† Para 42

"would not develop that habit of investment and banking" without which the people will not be weaned from the practice of hoarding.

(2) GOLD BULLION STANDARD.—After examining alternative monetary standards the Commission hit upon the "Gold Bullion Standard" as suitable for India. Any satisfactory scheme of Indian currency must fulfil, the Commission says,* three essential requirements: *simplicity, certainty and stability*. "A substantial measure of stability has been attained in the past. But simplicity and certainty have been lacking; and for a system of currency under Indian conditions and for the Indian people these two last qualities are as vitally necessary as the first. Without certainty and simplicity in the system, there will never in India be confidence in the stability of the currency, and without confidence in the stability of the currency, the uninstructed public will never be weaned from those uneconomic habits of hoarding and that disinclination to investment which are now the worst obstacles to the progress of the nation."*

This public confidence the Commission proposes to inspire by the introduction of a gold *standard* in India. "We have arrived at the conclusion that, in order to secure public confidence in India, the currency of the country must be linked with gold in a manner that is real and conspicuously visible, or, in other words, it is necessary to establish a true gold standard. It should be understood that this does not necessarily imply a gold currency. It is possible to have a true gold standard under which the currency is based on gold both in reality and in a manner that is conspicuously

visible, without putting gold in circulation..... The essence of the proposal which we proceed to develop is that the ordinary medium of circulation in India should remain as at present the currency note and the silver rupee, and that the stability of the currency in terms of gold should be secured by making the currency directly convertible into gold for all purposes, but that gold should not circulate as money.”*

The Commission rejected the gold exchange standard precisely because it was not *simple* and *certain* and, therefore, not calculated to inspire public confidence. “The basic right of convertibility that supports an exchange standard is too abstract for the present conditions in India: the backing which it supplies for the token currency is too intangible and invisible. Without some backing more certain, simple and solid, confidence in the stability of the currency will grow more slowly than it should, if it grows at all, and progress in the habits of banking and investment will be delayed.”† Such a backing will be provided by linking the currency with *gold*, in a manner that is at once real and conspicuously visible. The Commission is convinced that to remove the existing defects and to fortify popular confidence, “it is necessary to establish on a sure basis not only the *external*, but also the *internal*, convertibility of the token currency of the country into metallic gold.”‡

As we have seen before the Commission is opposed to a *gold currency* for India. But it claims that all the

* *Hilton Young Com. Report* : para 54.

† *Hilton Young Com. Report* : para 31.

‡ *Hilton Young Com. Report* : para 32.

advantages of that currency will be obtained under the adoption of the "Gold Bullion Standard". Under this the internal currency of the country—rupees and notes—are to be convertible, not merely into foreign exchange but into metallic gold, and this conversion is not to be conditional and circumscribed as formerly, but absolute and unlimited. The Commission proposes that an obligation should be imposed *by statute* on the currency authority to buy and sell gold without limit at rates determined with reference to a fixed gold parity of the rupee, but in quantities of not less than 400 fine oz., no limitation being imposed as to the purpose for which the gold is required."* The limit of 400 oz. is intended to prevent gold from being frittered away internally. The restriction as to price has been imposed in order to protect the currency authority from incurring the expense of importing gold for non-monetary purposes. The ratio, of course, is 1s. 6d = 1 rupee. At this rate (*i. e.* 1 tola of fine gold = Rs. 21-3 a-10 p) the currency authority *must buy* gold. If it was also required to *sell* gold at the same rate, it would become the cheapest market for gold in India and gold will be purchased from it not only for monetary purposes but also for *non-monetary* purposes. This would impose an unnecessary burden on the general tax-payer for the benefit of the purchasers of gold. More will be said about the buying and selling rates at a later stage.

To bring home to the people that the new currency is based upon gold in a more striking manner, the Commission proposes the introduction of Savings Certificates "redeemable in three or five years, in

* *Hilton Young Com. R.* : para 59.

legal tender money or gold at the option of the holder.”*

The introduction of the “Gold Bullion Standard” will practically dethrone the rupee from its present dangerous and dominating position. The introduction of new notes convertible into *gold* alone, and of one-rupee notes will tend in the same direction.

(3) DETHRONEMENT OF THE RUPEE—We must appreciate that in the composition of the internal currency of the future the rupees will pay a very subordinate part. The Commission has not exactly *demonetized* the rupee—for it is still unlimited legal tender—but it has certainly *dethroned* it from its dominating position in Indian currency. Its position is indeed anomalous. Ever since the suspension of the free coinage of silver in 1893 it became a *token* coin (with a bullion value *less* than its face value), and yet so strong were its claims upon popular imagination that its *unlimited* legal tender privilege could not be touched. It resembles the French five-franc silver piece which is also a token coin of unlimited legal tender. But whereas the coinage of the five-franc piece has been suspended, enormous quantities of rupees were added to the currency. Nor are other forms of French currency convertible into the five-franc pieces. In India the paper-notes of Government are convertible into rupees, and Government is also bound to supply rupees in exchange for sovereigns at the notified rate. All this points to the anomalous position of the rupee in the Indian currency. Various estimates have been made of the number of Rupees in circulation. The total amount has been put at between

* Para 67.

350 and 400 crores of Rs. This enormous coinage is a source of weakness to the whole currency system. Any rise in the price of silver above the silver bullion point (above 48*d.* per *oz.* at the exchange rate of 1*s.* 6*d.* = 1 rupee) threatens the silver currency. Again, because the paper currency is convertible into rupees, every expansion in note-circulation necessitates the holding of larger stocks of rupees in the Paper Currency Reserve, and some times the demand for rupees is so strong that the world's whole production of silver is not able to meet it as in the period 1917-19. All these difficulties will disappear by making the new notes of the Reserve Bank not only the principal constituent of internal currency but also convertible into *gold* alone. As the Hon. Sir Basil Blackett explained it in a speech at Delhi University in Nov. 1926, "This change is logically necessitated by the theory of the new currency system which makes gold the one and only standard of value. The position under which a note printed on paper has been convertible into a note printed on silver has in fact been a somewhat strange one for many years past. Under the new proposals of the Commission it will be logically very absurd to maintain the right of all forms of legal tender to convertibility into silver rupees, seeing that the essence of the system is that all forms of legal tender including the rupees depend for their value in exchange solely upon their absolute right of convertibility into gold".*

In practice the convertibility of the old (Government of India) notes as well as the new (Reserve Bank) notes into rupees will be

* *Of.* His Speech at Delhi University, Nov. 1926.

indistinguishable but the difference in the *legal* status of the two notes is important. The Commission also recommends the re-introduction of the one-rupee notes. This will be a serious rival to the rupee in the daily transactions of life. Not only will no *new* rupees will be coined for years to come but the Commission has recommended an elaborate programme for the *reduction* of the volume of rupee coinage and its eventual redemption into gold. Thus, as Sir Basil Blackett put it, "the transion from a rupee standard to a gold standard which has been in process for 33 years should at last be completed, and the new Indian currency system should slough off at last all the remains of the old skin belonging to its monometallic silver standard period."*

* Sir Basil Blackett's Speech at Delhi University in Nov. 1926.

CHAPTER XVI

INDIAN PRICES

(I) INDIAN PRICES BEFORE THE WAR:—It is necessary for the proper understanding of the bearing of the theory of monetary stability that is discussed in the next chapter that some account should be given here of the course of Indian prices. What the student has to note is that Indian prices are *rupee prices*, and their course in the pre-war period was more unstable and marked with greater fluctuations than the course of prices, say, in England, which are *gold prices*.

Attention was first drawn to the study of Indian prices when silver began to depreciate after 1873. The India Office submitted a memorandum on the subject to the Royal Commission on Depression of Trade and Industry (1885-86). From 1887 the Government of India began to publish the *Annual Trade Review* which contained index numbers of certain imported articles. A third attempt at the subject of Indian prices is that made by Mr. Atkinson who made a comprehensive study of "*Silver Prices in India from 1861*" and brought it up to 1909. He took some 39 articles—imported, raw materials and other food stuffs—and assigned to each a weight based upon the volume of production. When the Department of Commerce and Industry was formed in 1905 and when more attention began to be paid to statistical information, the Government of India began to publish an annual report on "Index Numbers of Indian Prices". It is based upon some 39 articles and is unweighted. It takes the prices in 1873 as equivalent to 100. The steady rise of Indian prices

since the beginning of this century again attracted the attention of Government and a special Committee was appointed under Mr. K. L. Datta in March 1910 to enquire into the rise of Indian Prices. Mr. K. L. Datt's report on this subject is a store-house of information and reference was made to this Report in another connection on page 168. The phenomenal rise in prices that took place during and after the War has made this subject of paramount importance. Memoranda on the rise in Indian prices were submitted to the Babington-Smith Committee and the Hilton Young Commission, and the *Labour Gazette* in Bombay publishes in its monthly number much valuable information about changes in prices in different countries of the world.

We may divide the study of Indian prices in two periods : the rise that took place before the War, and price-changes after the War. We may take 1861 as a convenient year to start with. Index numbers of prices calculated on the basis of the price level in 1873 as 100 have been published.* They have been studied in a recent book *Currency and Prices in India* by Vakil and Muranjan. Their results may be summarised as follows :

* See *Statistical Abstract* (Fourth Issue); page 592.

<i>Indian Prices</i>				<i>English prices.</i>			
Years	Change	Percentage rise + or fall—	Change per annum	Years	Change	Percentage rise + or fall—	Change per annum
—	—	—	—	1821-46	Fall	-25	1
1861-66	Rise	+50	10	1846-75	Rise	+20	•75
1866-83	Fall	-32	2	1875-98	Fall	-40	1•7
1883-93	Rise	+33	3				
1893-99	Fall	-17	3				
1899-1913	Rise	+38	2•8	1898-1913	Rise	+30	2

In the first *period* 1861-66 the American War sent up the price of cotton and cotton manufactures. There were heavy imports of silver and the amount of currency increased from 56 crores in 1861 to 99 crores in 1866. In the next *period* 1866-83 though the fall is general, it was particularly marked in the years 1876-79. This fall in Indian prices is the counterpart of general falling prices in the rest of the world. It has been attributed to the demonetization of silver and the increased demand for gold for monetary purposes. This period was also marked by increased production and extension of international commerce due to fall in transport charges. The rise in the *period* (1883-93) has been attributed to the depreciation of silver and heavy coinage of rupees. With the suspension of rupee-coinage in 1893 we enter upon the *period* (1893-99) of falling prices. The circulation of rupees fell from 132 crores in 1893 to 122 crores in 1899. In 1899 the exchange was stabilized at 1s. 4d. Also the world prices, after reaching the lowest level in 1896, began to rise steadily, and Indian prices rose in sympathy with them, as the exchange was steady, except in the year 1907-08. The rupee was a token coin and its internal value depended upon its *quantity*. We have already seen how under the Gold Exchange Standard India's favourable balance of trade came to be liquidated in greater quantities by additions to the silver currency. The automatic contraction of currency effected under the gold standard was absent. Rupees could not be exported or melted without loss, and hence the currency expanded—almost from year to year—with a corresponding rise in Indian prices. It should be noted that the *gold prices* in India increased much more than the gold prices in the rest of the

world. Comparisons have been made between these prices, by taking the 1890-94 period as the base and regarding the price level in this period as 100. The corresponding index numbers for India and United Kingdom are given in the following table. It should be remembered that the Indian prices have been converted to *gold* prices. To convert an index number of *silver* prices to an index number of *gold* prices, the index number for any year is multiplied by the rate of exchange of that year and divided by the rate of exchange of the basic year. The Indian index number is the *general unweighted* number based upon 39 articles. The Index number for United Kingdom is that given in the *Statist* and is based upon 45 articles.*

		India	United Kingdom			India	United Kingdom
1890	...	116	105	1902	...	108	101
1891	...	105	105	1903	...	102	101
1892	...	98	99	1904	...	104	102
1893	...	98	99	1905	...	112	105
1894	...	85	92	1906	...	132	112
1895	...	91	90	1907	...	140	117
1896	...	101	89	1908	...	140	106
1897	...	110	90	1909	...	126	108
1898	...	98	93	1910	...	124	114
1899	...	99	99	1911	...	132	117
1900	...	118	109	1912	...	140	124
1901	...	111	102	1913	...	146	124

* The figures are taken from Table 5 in Prof. Findlay Shirras' *Indian Currency and Banking*.

From this table as well as the one that precedes it the striking contrast between the movements of Indian and English prices before the War will be evident. England had a true gold standard and her price-movements were mainly connected with the gold supplies of the world. India, on the other hand, had a silver standard before 1893 and the prices *rose* an account of the depreciation of silver—and of the rupee. Before 1893 the fluctuations were *wider*. Since the stabilization of the rupee in 1899, Indian and English prices *both* rise, but the rise in Indian prices is *greater*, due, no doubt, to the absorption of a great deal of token rupee coinage and backwardness in banking and monetary organization.

(2) INDIAN PRICES DURING AND AFTER THE WAR*—In considering the war-time rise in prices we may altogether leave out of account the currencies of certain European countries, *e.g.* France and Germany that suffered enormous depreciation. We may confine ourselves to the currencies of the United Kingdom, the United States of America and India. The index-numbers of the first two are based upon the level of 1913 as 100 and that of India upon that of July 1914 = 100. The Indian figure is the 'Calcutta' figure based upon 45 articles. The U. K. figure is that of the *Statist* and the U. S. A. figure is that of the Labour Bureau.

* The student is recommended to read first the theory of stabilization given at the beginning of the next Chapter.

	United Kingdom	U. S. A.	India (Calcutta)	Average rupee-sterling exchange		Gold Value of the rupee	
				s.	d.	s.	d.
1913	100	100	—	1	4 $\frac{1}{16}$	—	—
1914	100	98	100	1	4 $\frac{1}{16}$	—	—
1915	127	101	112	1	4	—	—
1916	160	127	128	1	4 $\frac{1}{8}$	—	—
1917	206	177	147	1	4 $\frac{3}{8}$	—	—
1918	226	194	180	1	5 $\frac{1}{2}$	—	—
1919	242	206	198	1	8 $\frac{1}{16}$	1	7 $\frac{1}{16}$
1920	295	226	204	2	0 $\frac{3}{32}$	1	5 $\frac{25}{32}$
1921	182	147	181	1	4 $\frac{1}{32}$	1	0 $\frac{1}{16}$
1922	154	149	180	1	3 $\frac{19}{32}$	1	2 $\frac{3}{16}$
1923	152	154	176	1	4 $\frac{9}{32}$	1	3 $\frac{5}{16}$
1924	164	150	177	1	5 $\frac{1}{4}$	1	3 $\frac{21}{32}$

N.B. The gold value of the rupee is based upon the Calcutta-London rupee-sterling rate and London-New York dollar-sterling rate.

The general rise in prices is to be explained by the inflation of currency but the extent of rise is not the same in the three countries. It is *less* in India than in the U. S. A. and *less* in the States than in the United Kingdom. Thus the depreciation of the Indian currency was *relatively less* in India than of the dollar in the U. S. A. or of the sterling in the United Kingdom. And just as the *depreciation* of the sterling in terms of the dollar was due to the *greater* rise in English prices, as compared with American prices, so also the *rise* in Indian exchange (*i.e.* *appreciation* of its external value) was due to the *lesser* rise of prices in India compared with those in England. In other words the rupee *appreciated* with reference to the sterling and this explains the

rise of Indian exchange. The Government of India were not justified in raising the exchange in sympathy with the rise in the price of silver. The feverish rise in the price of silver was due to the demands of the Indian Government itself. The Indian exchange *rose* because world-prices were rising *faster* than Indian prices. The Babington-Smith Committee also was not justified in hoping that the high Indian exchange would be maintained for a long time. That would have been so if the world prices had *remained high*. For that would have amounted to a greater appreciation of the rupee in terms of gold and, therefore, a high exchange. The mistake of the Indian Government was disastrously demonstrated by the sharp fall in world prices that began from the end of 1920. From 1920 to 1921 gold prices as measured by the U. S. A. index number fell from 226 to 147 *i.e.* by 35 *p.c.* and sterling prices as measured by the *Statist* index number from 295 to 182, *i.e.* by 38 *p.c.* In the same period the Indian price level fell from 204 to 181, *i.e.* by 11 *p.c.* only. Thus the rupee had to a great extent *lost* the advantage of greater purchasing power with reference to gold and sterling it had up to 1920. This, by itself, would have brought down Indian exchange even if it had not been artificially and disproportionately raised by the Indian Government. The collapse of the exchange was as precipitate as the rise had been sudden. The failure of the Indian Government to maintain the exchange at 2s gold (or sterling) was partly responsible for keeping *steady* the Indian prices. Thus Prof. Keynes is of opinion that "if the Government of India had been successful in stabilizing the rupee-sterling exchange, they would necessarily have subjected

India to a disastrous price fluctuation comparable to that in England.”*

After 1921 there was a *rise* of gold prices in America and a tendency of the sterling prices to *fall*. This explains the improvement of the *sterling* in terms of the *dollar*. The average dollar-sterling exchange in the years 1920, 1921, 1922, 1923, was \$3·66, \$3·85, \$4·43 and \$4·57 respectively. Similarly, after 1922 the tendency of Indian prices was to *fall* and that of sterling and gold prices to *rise*. This explains the recovery of the Indian exchange from 1922 onwards. The average sterling-rupee exchange in 1922, 23, and 1924 was 1s. 3½d. 1s. 4¾d. 1s. 5½d. respectively. As Mr. Kisch—the Financial Secretary to the India Office—says, “While it is not suggested that any positive inference can be drawn from the index numbers referred to in this note, (and given in the preceding table) the figures are of interest as conforming, when considered in their broad aspect, to the view that movements in the rupee-exchange have a more or less definite relation to movements in world-prices. The collapse in world prices in 1920 contributed to the heavy fall in the rupee-exchange and the subsequent partial recovery in world-prices has been a substantial factor in promoting the rise in exchange from the low level of 1921.”†

This argument will throw light upon the question whether the present level of Indian prices is in adjustment with the exchange ratio of 1s. 6d. We shall consider in the last Part of the book the bearing of price-movements on wages, cost of living and industries generally.

* Prof. J. M. Keynes: *Tract on Monetary Reform*: p. 158.

† *Appendix* 69 to the Report of the Hilton Young Com.

CHAPTER XVII

MONETARY STABILIZATION

(A) THEORY OF STABILIZATION

(I) EXCHANGE AND PRICE STABILITY BEFORE THE WAR —It is necessary to make a short digression upon the theory of monetary stabilization in order that we may understand the problem of stabilizing the rupee with gold or sterling. The gold standard was operative in the world before the War. Those countries which were on the basis of a gold standard had their price-levels adjusted to each other by the movement of gold. If, for instance the price level in a particular country was *higher*, (relatively to that in the other countries) imports were stimulated and exports discouraged; this tended to make the balance of accounts unfavourable; there was a tendency of gold to go out; this, in its turn, by the contraction of internal currency by the method of raising the rate of discount of the Central Bank, brought down the prices, with a reduction in imports and stimulation of exports. It was the free movement of gold that kept the prices more or less steady in the different gold-standard countries. The foreign exchanges also fluctuated within very narrow limits, *viz.* the limits determined by the specie points, gold going out of the country at the lower point, and attracted to the country at the higher point. The par of exchange was determined by the *quantity* of gold contained in the gold coins of the different countries. As the

foreign exchanges fluctuated within narrow limits, attention was generally paid to keep the *exchange* steady and the internal price level was left to adjust itself to the stable exchange. There was no practical hardship felt in thus leaving the internal price level to take care of itself because as a matter of fact that level also changed slowly, and within moderate limits. This was indeed a merit of the gold standard. The *quantity* of gold available kept pace with the demand for it and thus prices remained comparatively stable. Reviewing the price level during the period 1815–1915 Prof. Keynes says: “During the first quarter of the Nineteenth Century the very high prices of the Napoleonic Wars were followed by a somewhat rapid improvement in the value of money. For the next seventy years, with some temporary fluctuations, the tendency of prices continued to be downwards, the lowest point being reached in 1896. But while this was the tendency as regards direction, the remarkable feature of this long period was the relative *stability* of the price level. Approximately the *same* level of price ruled in or about the years 1826, 1841, 1855, 1862, 1867, 1871, and 1915. Prices were also level in the years 1844, 1881, and 1914. If we call the index number of these latter years 100, we find that, for the period of close on a century from 1826 to the outbreak of War, the maximum fluctuation in either direction was 30 points, the index number never rising above 130 and never falling below 70.”*

(2) INFLATION AND THE THEORY OF PURCHASING POWER PARITY RATE OF EXCHANGE—But the internal price levels as well as the foreign exchanges

* Prof. J. M. Keynes: *Treatise on Monetary Reform* : pp. 11-12.

to which they had adjusted themselves were upset by the War. In the first place the free market in gold disappeared and with it the *regulative* influence of gold on internal prices. Secondly, the belligerent as well as the neutral countries, on account of the exigencies of financing the War, pursued a career of *currency inflation*. Prices *rose* in different countries, and to *different* levels, approximately proportional to the amount of inflation. The old theory of foreign exchanges was no longer found applicable. Prof. Gustav Cassel propounded a new theory of foreign exchanges. "The first question that has to be unravelled, if we are to gain a clear idea of the exchange problem which the War has bequeathed to us, is this: What is the principal reason for a foreign currency being in demand, and what effect has an alteration in the intrinsic value of that currency upon the demand for the same?"

"The putting of this question has brought me to the following line of argument: Our willingness to pay a certain price for foreign money must ultimately and essentially be due to the fact that this money possesses a purchasing power as against commodities and services in that foreign country. On the other hand, when we offer so* and so much of our own money, we are actually offering a purchasing power as against commodities and services in our own country. Our valuation of a foreign currency in terms of our own, therefore, mainly depends on the relative purchasing power of the two currencies in their respective currencies."* Thus if we take two

* Prof. Gustav Cassel: *Money and Foreign Exchange after 1914*: pp. 138-39.

countries A and B with a certain exchange rate between them to start with, then should an inflation of A's currency take place and consequently its purchasing power be reduced, the value of A's currency in the country B will necessarily fall in like proportion. Should at the same time B's currency have undergone inflation and its purchasing power have been reduced, clearly the valuation of A's currency in B will, as a consequence, rise in a corresponding degree. If for instance, the inflation in A has reached the ratio of 320 to 100 and the inflation in B the ratio of 240 to 100, the new exchange rate (taking the quotation of A's currency in B's currency) will be three quarters of the old rate. Thus the following rule: "When two currencies have undergone inflation, the normal rate of exchange will be equal to the old rate multiplied by the quotient of the degree of inflation in the one country and in the other." No doubt there will be deviations between the rate so calculated and the actual rate of exchange, but the rate as calculated above must be regarded as the new parity between the currencies, the point of balance towards which, in spite of all temporary fluctuations, the exchange rates will always tend. Prof. Cassel calls this parity the *purchasing power parity*.*

In the practical application of this theory certain assumptions and limitations must be borne in mind. (a) Thus it is assumed that the exchange rates that prevailed during the gold standard regime before the War were in equilibrium with the level of prices in the different countries. (b) The degree of inflation in the different countries is measured by means of index numbers; so that all the difficulties that are encountered

* Gustav-Cassel : p. 140.

in constructing such index numbers and using them for measuring changes in prices must be borne in mind. The difficulties are increased when different index-numbers of different countries are taken for the purposes of comparison. (c) Again, we must bear in mind the possibilities of deviations from the calculated rate of exchange. It is assumed that there is unrestricted or free trade between the two countries under consideration. But if a country puts artificial restrictions upon *exports*, its currency will be *less* valuable than is indicated by the purchasing power parity. Similarly, if a country puts artificial restrictions upon *imports*, the external value of its currency will be thereby raised. Again, there may be a temporary *undervaluing* of a country's currency in the world market on account of an *anticipated* depreciation of its currency. The same result will follow if there is *speculation* in the domestic currency and exchange. Similarly the practice of selling the domestic currency in order to obtain funds in a foreign currency will lead to an *undervaluation* of domestic currency. The theory of purchasing power parity rate of exchange also assumes that the prices of *all* commodities have risen uniformly. But this may not be the case. If the prices of those commodities that enter into *exports* have risen *higher* than the prices of commodities of domestic consumption then the actual rate of exchange will be *lower* than the one indicated by the purchasing power parity. On account of these and other difficulties the new theory of exchange has been shown to possess little *practical* value in calculating or foretelling the actual course of exchange of a country. But the theory is valuable in as much as it emphasizes the relation between the internal value

and the exchange-value of the currency of a country. For this purpose Prof. J. M. Keynes would take not the index number of foreign-trade goods only, but of *all* goods so as to find the *general* purchasing power of a country's currency. There is always a tendency for prices of those goods that enter into international trade to adjust themselves to the prices of goods that do not enter international trade, and, therefore, there is no harm in taking the *general* purchasing power of the currency, and there is a tendency for the exchange rate to approximate to this purchasing power. If the conception of purchasing power is thus broadened it becomes more significant though practically less useful for measuring exchange fluctuations. When the exchange-rate coincides with the purchasing power, "it is not possible to say in general whether exchange value will move towards purchasing power parity or the other way round. Some times, as recently in Europe, it is the exchanges which are the more sensitive to impending relative price changes and move fast; whilst in other cases the exchanges may not move until after the change in the relation between the internal and external price-levels is an accomplished fact. But the essence of the purchasing power parity theory, considered as an explanation of the exchanges, is to be found, I think, in its regarding internal purchasing power as being in the long run a more trustworthy indicator of a currency's value than the market rates of exchange, because internal purchasing power quickly reflects the monetary policy of the country, which is the final determinant. If the market rates of exchange fall further than the country's existing or impending currency policy justifies by its effect on the internal purchasing power of the

country's money, then sooner or later the exchange value is bound to recover. Thus, provided no persisting change is taking place in the basic economic relations between two countries, and provided the internal purchasing power of the currency has in each country settled down to equilibrium in relation to the currency policy of the authorities, then the rate of exchange between the currencies of the two countries must also settle down in the long run to correspond with their comparative internal purchasing powers. Subject to these assumptions comparative internal purchasing power does take the place of the old gold parity as furnishing the point about which the short period movements of the exchange fluctuate.”*

(3) STABILITY OF EXCHANGE *vs.* STABILITY OF PRICES—From this it follows that stability of exchange is the resultant of *two* factors: stability of the *internal* price level, and stability of the *external* price level. Of these the external price level (*i.e.* the level of gold prices in the world) must be beyond our control, and, therefore, either our *exchange* or our *internal* price level must fluctuate in correspondence with the external price level. If the external price level is unstable, we cannot keep *both* our price level *and* our exchanges stable. Whether we should stabilize our exchange *or* our internal price level must depend upon circumstances. “The right choice is not necessarily the same for all countries. It must partly depend on the relative importance of foreign trade in the economic life of the country. Nevertheless, there does seem to be in almost every case a presumption in favour of the stability of prices, if only it can

* Prof. J. M. Keynes: *Tract on Monetary Reform* : pp. 95-97.

be achieved. Stability of exchange is in the nature of of a convenience which adds to the efficiency and prosperity of those who are engaged in foreign trade. Stability of prices, on the other hand, is profoundly important to all sections of the community.”* A practical consideration that is likely to weigh in the making of a choice between price-stability and exchange-stability is the circumstance that exchange-stability is more easily attained in practice than price-stability. It merely means the adoption of the *same* monetary standard for internal as well as external purposes.

It should be noted that in considering the principles of monetary stability we are not raising here any question as to the suitability of the gold standard from the point of view of the internal stability of prices. There are some currency reformers *e.g.* Prof. Irvin Fisher and Prof. Keynes, who regard gold as a *barbarous* standard of value. The currency policy of the world is dependent upon such an uncertain factor as the discovery of gold. It is also contended that as the major part of the world's gold is now in America the restoration of the gold standard exposes the world price level to the vagaries of the credit policy of the Federal Reserve Board. “With the existing distribution of the worlds' gold, the re-instatement of the gold standard means, inevitably, that we surrender the regulation of our price level and the handling of our credit cycle to the Federal Reserve Board of the United States.”† Prof. Keynes would concentrate all

* Prof. J. M. Keynes : *Tract on Monetary Reform* : pp. 155-56.

† Prof. Keynes : *Tract on Monetary Reform* : pp. 174-75.

efforts on securing absolute stability of *internal* prices, and of employment, irrespective of the gold. On the other hand others *e.g.* Prof. Gregory, prefer a gold standard to any other 'managed' standard of value precisely because it does not depend upon the whim of any authority. "The great and overwhelming merit of the gold standard is just that it implies a world level of prices, and that, in consequence, changes in the position of classes and individuals, so far as they result from prices, cannot be easily attributed to the vagaries of particular politicians."*

We recognize, therefore, the fact that the world *has* re-adopted the gold standard, its shortcomings notwithstanding. We also take the level of world-prices as we find it. Compared with the pre-War price level gold has lost fifty *p.c.* in value. In strict theory we should deflate our currency to such an extent that prices will fall from the present level of 150 to 100. But as between Deflation and Devaluation the world has chosen the latter. America and England have declared their intention to maintain the existing level of prices, and by monetary stability we, therefore, mean, in effect, the assimilation of internal prices to those of England or the United States.

(4) VIEWS OF THE HILTON YOUNG COMMISSION ON MONETARY STABILITY:—The underlying principles of monetary stability have been very lucidly set forth by the Royal Commission also. "The goal of all monetary policy is the achievement of stability of the purchasing power of the monetary unit..... both internally and externally. This stability will find expression internally in the stability of the general

* Prof. Gregory: *First Year of the Gold Standard*.

level of commodity prices, and externally, in the stability of the purchasing power of the monetary unit in relation to gold, and consequently in relation to all exchanges with countries whose currencies are linked to gold through either a gold or gold exchange standard.”*

Internal stability is to be secured by controlling the volume of the monetary circulation in the country. “So long as the volume of the monetary circulation does not exceed, or fall short of, the amount of money at any time needed for the exchange of the quantity of goods and services=(regard being had to the ‘velocity of circulation’ and the frequency with which goods and services are exchanged), the purchasing power of the rupee will remain stable. The restriction of the monetary circulation within these limits is the fundamental condition for internal stability, while internal stability is the main factor to achieve external stability. To appreciate this, we need only think of the re-percussions which instability of the general level of internal prices has upon the foreign trade of a country. A rise of internal prices (that is, a fall of the internal purchasing power of the monetary unit) relative to the world-level of gold prices, will inevitably impede exports and stimulate imports, and cause the balance of foreign payments to be upset, and, with it, the exchanges. An internal depreciation of the monetary unit thus very soon produces external depreciation. The reverse is the case when internal prices fall below the world-level of gold prices. It clearly follows that stability of internal prices in relation to the world-level of gold prices will prevent those repercussions, and will therefore prevent-

* Para 144.

instability of the external value of the monetary unit, that is, of the exchanges. And if the exchanges are stable, and keep within the upper or lower gold points set by the fixation of the price at which the Reserve Bank undertakes to buy and sell gold, it will not be called upon either to buy or sell gold. Provided, therefore, the Bank follows a judicious policy of limiting the monetary circulation to the actual needs of the country by an appropriate credit policy, and so keeps the internal value of rupee stable, the obligation to buy and sell gold will cause it no embarrassment.”*

(B) MECHANISM OF STABILIZATION

(5) HISTORY OF PROPOSALS FOR A CENTRAL BANK FOR INDIA—Having considered the general principles of monetary stability we must now proceed to examine the new “currency authority” that is expected to apply the principles in practice. The Hilton Young Commission recommends that the entire control over the currency and credit policy of the country should be vested in a Central Bank—to be called “the Reserve Bank of India”.—This is perhaps the most valuable contribution it has made to the growth of a sound Indian Currency System. Before we examine in detail the proposals of the Commission let us measure the progress made in the direction of a centralised system of banking in India.

Reference has been made to the three Presidency Banks. They were deprived of their private note issue in 1862 and though for a time the paper currency was managed by them, this was finally taken over by Government in 1866. Until they were amalgamated

in 1920, the three Presidency Banks carried on their operations under the Presidency Banks Act of 1876—which was only slightly amended on two or three occasions—the Banks were confined to the territories that were assigned to them. Restrictions were also imposed upon the character of the business they were to transact. Thus they could not deal in exchange (that being the province of the Exchange Banks), borrow or receive deposits payable outside India, lend money for a longer period than six months, or upon mortgage, or on the security of immovable property, or upon promissory notes bearing less than two independent names, or upon goods unless the goods or titles to them were deposited with them as security. These Presidency Banks did a large amount of Government work such as the management of the Public Debt and treasury work in the Presidency Towns in return for which considerable public balances were left with them, the surplus being kept in the Reserve Treasuries.

Proposals to amalgamate the three Presidency Banks were made as early as 1836, and again in 1859 and 1876.* Sir Everard Hambro, a member of the Fowler Committee, referred to the advantages of a Central Bank. The question received a fresh impetus because it formed the subject of two carefully prepared memorandums, one prepared by Sir Lionel Abrahams of the India Office and the other by Prof. J. M. Keynes, at the instance of the Chamberlain Commission of which he was a member. The memorandum by Prof. Keynes has been published as

* Cf. Findlay Shirras: *Indian Finance & Banking* Ch. XIII for these early schemes.

an annexe to the Report of that Commission. The following points have been abstracted from that memorandum.

The proposed Central Bank was to do business both in London and in India. The London office of the Central Bank was to be a comparatively small affair. It was not to compete with the Exchange Banks in remitting funds in both directions by buying bills. But it was responsible for carrying on remittances on behalf of the Secretary of State in the most economical way, to hold balances in London and to use them in the London market. The London office was thus to have no direct dealings with the public, but only with the Secretary of State, the Money Market and other banks. It was to rediscount the trade bills of the other banks. It was to float sterling loans on behalf of the Secretary of State. The functions of the Central Bank in India were more onerous and extensive. It was to hold all the balances of the Government in India. It was to manage the Note issue on behalf of Government. It was to manage the Government Debt in India. But Prof. Keynes said that the management of the Mint and the custody of the Gold Standard Reserve should *not* be entrusted to the Central Bank. The proposed Bank would no doubt be formed by the amalgamation of the three Presidency Banks and would thus be a *private* Bank. But it would be in the closest relations with Government. Prof. Keynes discussed at great length the relations of the Bank with Government, and its shareholders. Government was to share the profits of the Bank after they reached a certain minimum, say about 18 *p.c.* Prof. Keynes concluded his

memorandum by adverting to the general advantages of such a Central Bank.

Advantages of a Central Bank: The direct advantages to *Government* would be: (a) the abolition of the Independent Treasury system which would make available large balances to the Money market through the new State Bank. (b) The Note-issue would expand and become more popular. (c) The responsibility of Government officials for a variety of financial and semi-financial business would be greatly reduced by handing over to a Bank all questions of balances, note issue, remittance, and loans on the London market. (d) The Government has at its command the services of officers of the highest position, trained in financial and banking business, instead of Civil Servants who, however full of adaptability and intelligence, have been selected and trained mainly for other purposes. (e) a buffer is placed between the Secretary of State and vexatious criticism on small details of financial business.

The immediate advantages to the *business world* would be these: (a) In addition to the partial release of Government balances through their deposit in a central institution, a considerable amount of funds is made available by the reform of the Note issue. (b) The wide fluctuations of the bank rate and its normal high level in the busy season may be somewhat moderated. (c) The increase of branches, which the union of Government and banking business should promote, would gradually bring sound banking facilities to many parts of India, where they are now almost entirely wanting, both directly and by supplying a basis, in reliance

on which private and co-operative banking could be built up. (d) The introduction of re-discount facilities might greatly aid the eventual development of Indian banking on the most desirable lines.

Prof. Keynes referred to certain *wider and more general advantage* that would accrue from a Central Bank. (a) A Central Bank would introduce increased stability into the Indian banking system. India is not well placed at present to meet a banking crisis. The Presidency Banks are already Banker's Banks to an important extent, but they are not strong enough to support the whole burden. In effect the Government keeps a part of the banking reserves, but there is no machinery for bringing its reserves into normal connection with banking. With no central reserve, no elasticity of credit currency, hardly a re-discount market, and hardly a bank rate policy, with the growth of small and daring banks, great increase of deposits and a community unhabituated to banking and ready at the least alarm to revert to hoarding, even where it had been seemingly abandoned, there are to be found most elements of weakness and few elements of strength.

(6) THE IMPERIAL BANK OF INDIA—Such, in brief, were the advantages that were claimed for Central Bank. The absence of such a Central Bank was very keenly felt in the crisis of the Great War, and as a first step in the direction of having a Central Bank, the three Presidency Banks were amalgamated in 1920 to form the Imperial Bank of India. The Imperial Bank differs in important respects from the scheme proposed by Prof. Keynes. Thus it has not been invested with the function of note issue. The hiatus, therefore, between the money-market

and the balances of Government remained as great as before. As a partial relief, the Indian Paper Currency Act of 1923 allowed a sum up to 12 crores of Rs. to be advanced to the Imperial Bank on the security of *hundis*. Again, the Imperial Bank was not entrusted with the function of remittance of funds to the Secretary of State though it was allowed to open an office in London. There was no provision, finally, under which the State shared the profits of the Imperial Bank.

The following points should be noted in connection with the Imperial Bank of India. (i) The present agreement between Government and the Imperial Bank was made, in the first instance, for 10 years only. Thus it is liable to termination or revision in 1930. (ii) The authorized capital of the Bank was 1125 lakhs, out of which 562½ lakhs, or one half, was paid. The capital is divided into shares of Rs. 500 each. (iii) The general superintendence of the affairs and business of the Bank is entrusted to a Central Board—It consists of the Presidents and Vice-Presidents of the Local Boards at the three Head Offices of the Bank *viz.* Bombay, Calcutta and Madras; the Controller of the Currency; four non-officials nominated by the Governor General in Council; the Secretaries of the Local Boards referred to above; and two Managing Governors appointed by the Governor General in Council. The Central Board is intended to secure due representation of all important interests concerned *viz.* Government, the Local Boards, the share-holders and the general public. The Central Board has a small Managing Committee. The *Local Boards* manage the head-offices of the Imperial Bank at Bombay, Calcutta and Madras. (iv) A general meeting of the share-

holders of the Imperial Bank must be held on the first Monday of August of every year at which the Central Board is to submit to the shareholders a statement of the affairs of the Bank up to the preceding 30th of June.

(v) An important provision of the Act was the requirement that the Bank was to open at least 100 new branches within the first five years, of which at least one-fourth were to be established at such places as the Government of India may direct.

(7) NEED FOR A TRUE CENTRAL BANK DISTRICT FROM THE IMPERIAL BANK—The creation of the Imperial Bank of India no doubt went a long way in putting the banking position of the country on a sound basis. But the difficulties of a duality of control were not removed. As Sir Basil Blackett explained "As things are at present, the Imperial Bank is charged with the duty of supervising the banking reserves of India and making itself responsible for the credit policy of the Indian money market. In order to assist in this task it has the control of the balances in India of the Government of India except that small portion which still remains in the revenue treasuries, but it has no control over the balances of the Government of India outside India or over the currency reserves. The responsibility for control of the currency reserves is shared between the Government of India and the India Office and even at the best of times the geographical distance which separates the two authorities who are jointly responsible must inevitably lead to vexatious delay where rapid and decisive action is imperative if things are to work smoothly. The arrangements for co-operation between the Imperial Bank in its control of credit policy and the authorities responsible for the control of currency policy have worked reasonably well

but have been largely of a hand to mouth character. The unification of control over both the banking and currency reserves of India and even the currency and credit policies of India under one authority is clearly a desirable reform if it can be achieved.”* The disadvantages of the present duality of control have been clearly set out by the Hilton Young Commission which says : “India is perhaps the only country, among the great trading countries of the world, in which the government exercises direct control over currency in general and over the note issue in particular. The banking and currency reserves of the country are thus separated, which diminishes their capacity to effect their specific purpose of stabilization in the most economical and efficient manner. In other countries this is effected by concentrating these reserves at a Central Bank. Moreover, Government control of currency results in a dual control of monetary policy. The Government controls the currency. The credit situation is controlled, so far as it is controlled at all, by the Imperial Bank. With divided control, there is likelihood of divided counsels and failure to co-ordinate. In fact, difficulties have arisen owing to the existence of two distinct authorities controlling currency and credit. The only certain way to secure co-ordination is to concentrate the controls in one hand. In other countries the single controlling hand is that of a Central Bank.”† Again in another place of the Report‡ the Commission refers to “the inherent weakness of a system in which the control of currency and credit is in the hands of two distinct authorities whose policies may be divergent,

* Sir Basil's Speech at Delhi University in Nov. 1926.

† Report of the Commission, para 20.

‡ Para 83.

and in which the currency and banking reserves are controlled and managed separately one from the other." It emphasised the necessity of a unity of policy in the control of currency and credit in a modern financial organization, if monetary stability is to be achieved.* After referring to the advantages which other countries have derived from a Central Bank, the Commission says: "India, profiting by the experience of other nations, should perfect her currency and credit organization by setting up a Central Bank with a charter framed on lines which experience has proved to be sound."† Can the existing Imperial Bank of India be turned into a Central Bank? The practical difficulties of the conversion of the Imperial Bank into a Reserve Bank were found to be insuperable and such a conversion is also not theoretically sound. To be a Reserve Bank the Imperial Bank will have to be bound by various restrictions and such an emasculation would give a bad set-back to the progressive extension of banking facilities in India. As Sir Basil explained: "The twin needs of India in regard to banking are a strong Central Bank in whose hands the control of India's currency and discount policy and responsibility for her banking and currency reserves will be unified, and a vigorous development of banking facilities with the establishment of more branch banks and new agencies throughout India. And the plain fact is that one institution cannot fulfil both these requirements. Nor would it be fair to other banks or in the long run consonant with the interests of India to permit one single institution to monopolise the field. If the Imperial Bank is to

* Para 83. † Para 85.

continue to perform the admirable work it has been doing in the last five years in spreading branch banking in the mofussil, it cannot be subjected to severe restrictions on its daily activities. And it cannot be left with unrestricted powers to swamp all other banks with the help of a monopoly of note-issue, freedom to deal in exchange (a vital necessity if it is to manage Government remittances) and continued use of the balances of the Government. And what would become of the very valuable recommendation of the Commission that the other banks should be compelled to keep a proportion of their reserves with the Central Institution, if that Central Institution were the Imperial Bank? Many of them will welcome the privilege of being "Member Banks" with the Reserve Bank as the head of the Reserve System. It will give them increased assurance of liquidity for their resources, and will be a friend and not competitor. But they will clearly fight to the death against a proposal to compel them to keep large balances without interest with the Imperial Bank, their competitor and rival.* The Commission, therefore, rejected the idea of converting the Imperial Bank into the Reserve Bank, though Sir Purshottamdas held the view that such a conversion is practicable and has a precedent in the French *R serve Bank* which has more than 600 branches and is also the apex of the Reserve System. But the Commission concluded that on the whole it would be more advantageous to constitute a *new Bank*, and leave the Imperial Bank absolutely unfettered to provide increased commercial banking facilities to the country.

* Sir Basil's speech at Delhi University, Nov. 1926,

(8) THE RESERVE BANK OF INDIA—Coming to the details of the organization of the Central Bank, the Commission recommended (1) that it should be a shareholders' bank with a share capital of 5 crores of Rs.; (2) Its name should be "Reserve Bank of India"; (3) Its affairs should be managed in generally the same manner in which those of the Imperial Bank of India are managed, *i.e.* by means of a Central Board for the affairs of the Bank as a whole, and by Local Boards for the local Head Offices of the Central Bank. The Commission was of opinion that the Government should have due representation on the Central Board. "In the particular circumstances of India, *viz.*, the wide experience of the Government in the management of the currency and the great importance of the Government's banking and remittance business, it would not only be appropriate but desirable that the Government should nominate a small minority of members on the Central Board, the members of the Local Boards being, as hitherto, elected solely by shareholders of the respective branch registers."* The Commission recommended a Central Board of 14 members, *viz.* the Presidents, Vice-Presidents and one elected member each from the three Local Boards of Bombay, Calcutta and Madras, the Managing Governor and Deputy-Managing Governor appointed by the Governor-General-in-Council for five years and three non-officials also nominated by the Governor-General-in-Council.

The Commission expressly laid down that "to eliminate the danger of political pressure being exercised upon the Boards of the Reserve Bank, it

* Para 94.

is desirable to introduce a provision in its charter directing that no person shall be appointed President or Vice-President of a Local Board, or shall be nominated as a member of the Central Board, if he is a member of the Governor-General's Council, the Council of State, the Legislative Assembly, or of any of the Provincial Governments or Legislative Councils."* (4) The Head Office of the Bank should be in Bombay, and the meetings of the Central Board should be held there. (5) As in the scheme of Prof. Keynes, the Commission recommended that Government should have a share in the profits according to an elaborate plan it drew up. (6) Regarding the functions of the Bank, the Commission drew up two lists, one of business which the Bank *should* do, and the other of business which the Bank *should not* do. The basic principles in drawing up the lists were two: *viz.*, "That the Bank should be a true Central Bank and that its functions and capacities should be so organized as to secure that it should be made use of without suspicion or jealousy as the Bankers' Bank."† (7) The Reserve Bank "should be entrusted with all the remittance operations of the Government in India and in London. The Government will thus cease to operate in the exchange market. Such an arrangement is the natural consequence of the establishment of a Central Bank of issue. The business of remittance is essentially banking business. Since the bank of issue must be the bank of the Government in other matters, it is convenient, and also essential, that it should be so in this matter also; and it may be assumed that it will be able

* Para 95.

† Para 102.

to transact the business at least as economically as the Government. Further, an obligation is imposed upon the Bank to maintain the value of the currency. The annual remittance on Government account amounts to some £35 millions, a large sum in proportion to the total foreign remittance business of the country. The time and method of making these remittances have an intimate connection with the Bank's discharge of its obligations. It would be difficult, if not impossible, for the Bank to discharge its essential obligation to the currency unless it conducted the remittance business of the Government."* In making such remittances the Central Bank will not compete with the Exchange banks in their trade remittances. It will be a great convenience if the Secretary of State provided the Bank with a forecast of the funds he may require. (8) The Reserve Bank should manage the Note-issue of India. A word will be said presently regarding the principles of Note-issue recommended by the Commission. It also was in favour of the accounts of the Banking and Issue Departments being shown *separately*, as such a separation would inspire greater confidence in the new notes. The Commission also recommended that the notes of the Bank should be guaranteed by the Government of India. The purpose of this guarantee is to promote confidence in the notes of the Bank. "A double change is proposed in the status of the note. It is to be a bank note instead of a Government note, and it is to be convertible into gold bars and not as of right into silver rupees as in the past. In order

* Para 103.

to obviate any discredit that might attach to the new note in consequence of these changes, it is in our opinion essential that the note should be guaranteed by the Government at least for the first period of the Bank's charter."*

Such were the main proposals of the Hilton Young Commission on the question of the Central Bank. As fate would have it, the realization of the scheme in practice has been postponed on account of the strong opposition to the Reserve Bank Bill that was evinced in the Legislative Assembly. The Commission contemplated a Shareholders' Bank; the Assembly wanted a State Bank. When this demand was conceded, opposition centred round the next point: the constitution of the Directorate of the New Reserve Bank. In spite of the express admonition of the Commission to the contrary, the Assembly wanted its own representatives on the Directorate. The Mahomedans also were agitating for a seat or two being reserved for their own community. I agree with the view that as far as possible the Reserve Bank should be free from the unhealthy influence of politics and communalism. Judging from newspaper reports it would seem that the Hon. Sir Basil Blackett adopted a laudable spirit of accommodation on the question of the constitution of the Directorate and one very much regrets that legislation had to be held up because of stubborn opposition from above and obstructionist attitude from below.

The question of the constitution of the Reserve Bank assumed such importance that the Finance

* Para 138.

Member, at one stage, actually tendered his resignation, and later on was called away to England to confer with the Secretary of State.

(9) PRACTICAL MEASURES FOR STABILIZATION—Supposing we had a central currency authority, we must next consider the practical measures it will have to adopt for securing monetary stability. With the level of world-price beyond its control and with the exchange once stabilized it follows that all effort of the currency authority must be directed to adjusting the level of internal prices to the world prices. This is brought about by a suitable expansion or contraction of currency according to the requirements of trade.

(a) *Defects of the Existing System*—Under the Gold-Exchange Standard *expansion* in the currency was secured (1) by the coining of more rupees to meet the demand of increased sales of council drafts by the Secretary of State; (2) by the purchase of sterling by Government; (3) by the increased circulation of notes. (4) We have also seen that during the last few years provision was made to impart a seasonal elasticity to the currency by empowering the Imperial Bank to borrow up to 12 crores of Rs. on the security of inland bills of exchange. *Contraction* of currency was secured (1) by the sale of Reverse Councils. But the Commission points out that the contraction was neither automatic nor equivalent to the sales of Reverse Councils. The Commission gives the following table in support of its remark.*

* *Hilton Young Com. Report* : para 16.

Years	Amount of reverses sold £000	Rupees received for reverses sold Rs. Lakhs.	Amt. of contrac- tion effected Rs. Lakhs.
1907—8	8,058	12,16	12,16
1909—10	156	24	Nil
1914—15	8,707	13,16	1,05
1915—16	4,893	7,38	34
1918—19	5,315	7,08	Nil
1919—20-21	55,532	47,14	34,68

A second method by which contraction is effected is by the method of sale of sterling to the Exchange Banks.

But we have already seen before that the working of the currency is not automatic under the Gold Exchange Standard. Too much is left to the discretion of the currency authority and the exchange standard also did not inspire confidence among the public, and has been, therefore, rejected by the Royal Commission. "The automatic working of the exchange standard is thus not adequately provided for in India, and never has been. The fundamental basis of such a standard is provision for the expansion and contraction of the volume of currency. As the reserve rises or falls with a favourable or adverse balance of trade, the currency must be automatically expanded or contracted, and the adjustment between the internal and world prices maintained. Under the Indian system, contraction is not, and never has been, automatic. On occasions the

obligation to buy sterling exchange has been discharged by the Government without any corresponding expansion of domestic currency: the purchases have in the first instance been made against Treasury balances and the currency expansion has been left to be effected subsequently at the discretion of the Government. More serious has been the absence of contraction on occasions when the currency authority has had to sell sterling exchange.”*

(b) *Introduction of the Gold Bullion Standard*—The first measure which the Commission recommends in the interest of the automatic expansion and contraction of the currency is the *statutory* obligation on the currency authority to buy and sell gold (in quantities of 400 oz.) at the par value of the rupee. Reference has been made to this Gold Bullion Standard before. “A sound gold standard postulates a statutory obligation upon the currency authority to buy and sell gold at a price equivalent to the par value of the monetary unit. This obligation constitutes the cardinal condition and compelling force for the maintenance of monetary stability in relation to gold, and, through gold, in relation to all monetary systems similarly linked to gold or gold exchanges.”†

The Commission has distinguished between the *monetary* demand for gold and the *non-monetary* demand which latter is important in the case of India, and is ordinarily satisfied by the bullion market. While gold is to be had in *unlimited* quantities for monetary purposes at the par value it is not to be so had for *non-monetary* purposes. “If the currency authority

* *Hilton Young Com. Report*: para 16.

† *Hilton Young Com. Report*: para 64.

were compelled to sell gold at a price exactly corresponding to the par value of the rupee, it would at once become the cheapest market for gold in India in all ordinary circumstances, for a selling price so determined would take no account of the costs of importation nor of any deviation in the value of the currency from its gold parity.”* This would destroy the bullion market for gold and impose a great burden upon the taxpayer for the benefit of the purchasers of gold. “It is essential, therefore, that the conditions which are to govern the sale of gold by the currency authority should be so framed as to free it in normal circumstances from the task of supplying gold for non-monetary purposes.”† The obligation to *buy* gold (at the parity of Rs. 21-3-10 pies per *tola*) does not give rise to any difficulty nor call for discrimination in price. This obligation is, therefore, unconditional. The delivery of gold may be required in *London* or in *India*. The delivery in London will be necessary only for monetary purposes (*i.e.* when there is an adverse balance of trade). The selling-rate for delivery in *London* will be the par-rate (Rs. 21-3-10 per *tola*, equivalent to Re. 1=1s. 6d.) *plus* a charge covering cost of shipment to London and loss of interest. The delivery of gold in *India* will be either for *monetary* purposes (*i.e.* when a favourable balance is to be liquidated) or for *non-monetary* purposes, *i.e.* when it is required for consumption. For the former purpose, gold is to be sold *at par* when the exchange is at the *upper* gold point or above it (for then the gold is sure to go to India in any case). When exchange is at *lower* levels, delivery of gold is required in India presumably

* *Hilton Young Com. Report* : para 64.

† Para 64.

for non-monetary purposes and, therefore, an *additional* charge (to deter such sales) will be necessary for the selling price.

It will be seen that this Gold Bullion Standard is *automatic*. Nothing is left to the *discretion* of the currency authority. The sales or purchases of gold are to be *unlimited*. In all these respects it differs fundamentally from the Gold Exchange Standard. The contraction and expansion of the currency is also automatic. The compensatory action of the exchange standard is preserved. "When gold bars are given by the currency authority for notes or rupees, the currency is contracted, while, on the other hand, when gold bars are given to the currency authority for notes or rupees, the currency is expanded."*

An important advantage of the automatic Gold Bullion Standard is that it will minimise the disturbing influence of hoarded currency upon the expansion and contraction of the circulating medium. We have already seen how the hoarding habit was encouraged by the currency policy underlying the gold exchange standard. "Apart from the economic loss to India, the existence of a large volume of currency in hoards is a formidable obstacle to the efficient working of any currency system. As long as the circulating media of the country, whether silver coin or gold coin or notes, are employed for hoarding, the control of the currency authority over expansion and contraction of currency must be uncertain and there must be a possibility of fluctuation of prices wider than would be the case if all currency served merely the purpose of a medium of exchange."† The hoards may be in

* Para 60.

† Para 63.

sovereigns or half sovereigns or in rupees. By depriving the sovereigns of their legal tender character and by allowing the rupees to be drawn out of the hoards under the proposed Gold Bullion Standard and also by the inducement of the gold Saving Certificates, the Hilton Young Commission hopes to eliminate the disturbing influence of the hoards.

(c) *An Elastic Note Issue*—The next measure which the Commission recommends for introducing elasticity in the currency is a new principle of Note Issue. There are roughly two systems of note-issue; the first is the fixed fiduciary issue system illustrated by the Bank Charter Act of 1844. This system ensures perfect safety of the notes, but at the expense of elasticity, for it is obvious that beyond the fixed fiduciary limit expansion or contraction of the currency can take place at a rate *exactly* corresponding to the increase or decrease of the gold reserves. In England, however, on account of the development of the cheque system, this system has worked well. The other system—which may be called the proportional reserve system—is in operation on the Continent of Europe and in the United States. Under it the notes in active circulation are secured by a minimum percentage of gold or gold securities. This minimum, however, may be transgressed with the consent of Government for short periods on condition that the issuing bank pays a tax reckoned on the amount of the deficiency. In this system the expansion and contraction of currency do not, as in the system of fiduciary minimum system, take place at the same rate as the gold reserves increase or decrease, but that they take place in the proportion of 100 to

40 (if we take the 40% reserve in the Federal Reserve System of America). An addition of 40 units to the gold reserve permits an expansion to the extent of 100 units; conversely, a loss of 40 units from the reserve forces a contraction of 100 units. This system, therefore, is more elastic than the first system.

Now the cheque-habit has not made much progress in India, and thus the fixed fiduciary minimum system was found too rigid, and the proportional reserve system was, therefore, already adopted in the Indian Paper Currency Act of 1923. The Commission endorses this decision. "The need for seasonal expansion and contraction in India is particularly pronounced owing to the mainly agricultural character of its internal economy. We therefore recommend the adoption of a proportional reserve system of note issue."* As we have already seen, there is to be an Issue Department separate from the Banking Department and the notes of the Bank are to have the *additional* guarantee of the Government of India. The charter of the Bank provides for the transgression of the 40 p.c. limit of reserve with the consent of the Governor-General in Council provided the Bank paid a total tax of *at least* six per cent on the amount by which the reserve was short of the required 40 p.c.†

(d) *An Effective Credit Policy*—This last provision will enable the Bank to supply additional currency during the busy season. The third measure by which the Bank is to control the expansion and contraction of currency is by an *appropriate credit policy*. This has reference to the control exercised by a Central Bank over the Money Market by means of a Bank rate or

* Para 131.

† Cf. para 153.

the Rate of discount. In the English Banking System the raising of the rate of discount by the Bank of England is a sign for the *contraction* of credit and lowering of the rate is a sign that the money market is easy. It is out of place here to go into the elaborate mechanism of the English money market. The difficulty of the Indian Money Market arises from the fact that the true bills of exchange are to be had in limited quantities. The inland trade is financed by the so-called *Hundis*. They are drawn by one *shroff* (or Indian banker) upon another and the Imperial Bank discounts these inland bills. But the Bank's real security in the matter of purchasing or rediscounting bills is the personal standing of the drawee or endorser or acceptor. This is particularly so with regard to what are known as finance (or 'Hand') bills as opposed to genuine 'trade bills'. In either case the security is personal but in the case of a 'trade bill' there is produce or goods *somewhere* against which the bill is drawn.

In the Indian money market the bank rate is not *such* an effective rate for controlling credit as is the case in the English money market. The Money-rates prevailing in 1925-26 can be seen from the following table.

	Bank Rate	Call Money Rate		Imp'l. Bank	Bazaar Bill Rate		Figs. in lakhs Cash balance of the Imperial Bank in the last week of
	%	Calcutta	B'bay	Hundi Rate	Calcutta %	B'bay %	
April 1925	7	5	6½	7	10-11	11½	20,16
May „	7	5½	6¾	7	10-11	11½	21,64
June „	6	5	5¾	6½	10-10½	10½	33,98
July „	5	2	3½-4	5½	10-10½	9½	46,86
Aug. „	4	2	1¾	4½	10-10½	8½	42,73
Sep. „	4	1½	1½	4½	10-10½	8½	31,98
Oct. „	5	1¾	1	5	10½-11½	9¾	24,96
Nov. „	5	2½	1½-2	5½	10½-11	9¾	21,60
Dec. „	5	2½	3	5½	10-10½	9¾	16,82
Jan. 1926	6	3½	3½	6	10-10½	9¾	17,67
Feb. „	6	4½	4¾-5	6	10-10½	9¾	17,99
Mar. „	6	5	5½-6	6	10-10½	10½	25,23

The *bank-rate* is the rate at which the Imperial Bank will ordinarily advance money against Government securities, while the Imperial Bank *Hundi rate* is the rate at which the Imperial Bank will discount or rediscount first class three months' bills. The *bazaar* rates are those at which the bills of small traders are discounted by shroffs. The rates for bills of large traders and shroffs follow closely the Imperial Bank

Hundi rate.*

The bank rate as well as the bank Hundi rate is closely dependent upon the cash balances of the Imperial Bank of India as can be seen from the figures given in the last column of the foregoing table. The balances reach their maximum in the slack season (July-October) when also the money rates are easy. The balances are depleted when the important commercial crops have to be 'moved,' and the money rates also correspondingly move up. It has been noted before that the peculiarity of the bank-rate is the *wide* range of fluctuation, it being very high 7 to 8 *p.c.* or more in the busy season, and falling sharply when the crops are harvested and money flows back into the banks. It is in the busy season that the Imperial Bank borrows money from the Paper Currency Reserve to the limit of 12 crores on the security of *hundis*. In 1925-26 8 crores of rupees were thus borrowed though the money market was remarkably easy in the busy season of that year.

As previously noted the Imperial Bank is not able to control the credit policy effectively because it has not full control over the currency. The new Reserve Bank will have control over both, and hence its credit policy will be more effective. This result will be facilitated if there develops an extensive rediscount market in India. The Commission looks forward to the rapid development of such a rediscount market in Indian bills, for then alone there would be a seasonal expansion and contraction of currency. After referring to the seasonal demand for currency in

* See *Report of the Controller of Currency for 1925-26*, for the table : p. 18.

India the Commission says: "If that part at any rate of the notes which the Bank issues to meet the need of expansion is secured by assets of a character corresponding to this need of expansion, that is, if these assets mature and are liquidated when the increased monetary circulation is no longer needed, the process of expansion and contraction becomes almost automatic. The true commercial bill, that is, a bill drawn in respect of a genuine commercial transaction, has these characteristics in a pre-eminent degree. It is a self-liquidating asset in the sense that the liquidation of the commercial transaction liquidates the bills."* The Reserve Bank has been authorized to issue notes against the security of such commercial bills.

Some, *e.g.*, Sir Purshottamdas, are sceptical about the development of such a rediscount market in India. The most active Banks in India that deal in the true bills of exchange are the Exchange Banks and they would go to the Central Bank for re-discounting their bills only when its re-discounting rate is *lower* than the discount rate in London, but this is seldom likely to happen. The proposed Central Bank will have, therefore, to compete with the Imperial Bank of India for attracting the internal bills or *Hundis*. Sir Purshottamdas fears "that either the Central Bank and the Imperial Bank will have to compete with each other, or the Central Bank will not find sufficient scope for business to employ its funds"† and he is, therefore, opposed to the creation of a rival Bank to the Imperial Bank of India. But we have already seen the desirability of a true Central Bank for India—to

* Para 116. .† *Minority Report*, para 63,

control the currency and credit policy of the country—and the question need not be further pursued.

(e) *Measures for Securing External Stability*—We now come to examine the means to be employed to secure the *external stability* of the Indian currency. In practice this amounts to the contraction of the currency, thus *lowering* internal prices and raising the exchange. The maximum amount of such contraction would be equal to the excess of India's payments abroad over her receipts, i.e. equal to her adverse balance of payment. It is comparatively easy to determine the magnitude of the Reserve required to bring about such contraction if the internal currency had consisted entirely of *paper*. But we have already seen that the hoarded rupees exercise a disturbing influence upon the contraction. A main recommendation of the Commission lies in minimising this effect by the gradual replacement of the rupee hoards by gold by the reduction of the rupee coinage in circulation. As we have seen there are from 350 to 400 crores of Rs. in existence. About 150 crores will be the *minimum* amount required for monetary purposes. Thus the limit of contractibility of the rupee coinage is about 250 crores. The Commission has recommended a programme for the redemption of this amount in course of time.

(f) *Home Remittances*—The Central Bank has also been given full control over the remittance of funds to England on behalf of the Indian Government, and we have already seen that by a suitable arrangement of the amount and time of remittance, the Bank will be able to regulate the exchange rate.

Important developments have taken place in the system of Government remittances to London

during recent years. As we have seen before, the main method by which the Secretary of State was placed in funds before the War was by sale by open tender of Council drafts on the Government of India; the same method was maintained during the War subject to certain modifications. But two departures were made in the method. Since Dec. 1916 the 'intermediate' drafts, which were regularly sold between the weekly auctions, were suspended. Secondly, there was no provision for the sale of rupees without limit at a price corresponding to the upper gold point, owing to abnormal exchange conditions. No sales of Council drafts took place in London between the date of the publication of the Babington Smith Committee and Jan. 1923. Since then the sales have been supplemented by the purchase of sterling by the Government of India in India. The sterling so purchased is credited to the Secretary of State in the Bank of England. The importance of this method of remittance will be gathered from the fact that from Jan. 1923 to Dec. 1925 nearly £94 millions were so transmitted against £23 millions realized by the sale of Council drafts in London. In the purchase of sterling, the rate selected was generally 1s. 6 $\frac{3}{4}$ d. which corresponds to the upper gold point on the basis of a 1s. 6d. rupee.* The method of remitting funds by the purchasing of sterling was exclusively adopted in the year 1925-26, no Council drafts being sold. The purchases were made not only when the exchange was 1s. 6 $\frac{3}{4}$ d. in June 1925, but at 1s. 6 $\frac{3}{4}$ d. which was reached in

* Cf. *Appendix 73* to the Report of the Hilton Young Com. Memorandum on Remittances.

August. At this rate Government again purchased sterling. In fact from May 1925 to Feb. 1926 Government purchased sterling in India to the extent of £ 46·3 millions by parting with 61·23 crores of Rs. in India. The remittances to London were made entirely by the purchase of sterling in India and at no time Council bills were offered for sale in London. It was thus the willingness and ability of Government to purchase sterling that maintained the exchange at 1s. $6\frac{3}{4}$ - $6\frac{3}{8}$ d and prevented it from rising above this rate. Thus in 1925-26 the remittance operations were the dominating factors in the exchange market.

(10) THE RESERVE—We have now considered how the currency authority is to maintain the internal and external value of the circulating medium. It now remains to form some idea of the nature of the Reserve on which the currency authority must obviously depend for its ability to contract and expand currency. Two Reserves had been built up for this purpose in course of time, the Paper Currency Reserve to secure the *internal* convertibility of the notes into rupees, and the Gold Standard Reserve to secure the *external* convertibility of rupees and notes into sterling. We have already seen that as a matter of fact the part of the Paper Currency Reserve located in London *was* utilized to strengthen the Gold Standard Reserve, and indeed a certain overlapping between the two Reserves was inevitable because of the interchangeability of notes into rupees. The duplication of the Reserves often led to inconvenience in practice. The Chamberlain Commission recognized that these two Reserves, as well as the Balances in India and England formed, in the last analysis, one fund, but it was not prepared to

amalgamate the two Reserves. The experience of the War showed the desirability of amalgamating the two Reserves and the Hilton Young Commission recommends this step. This reform will be facilitated by the recommendations of the Commission with regard to the convertibility of notes into *gold* only. It will, therefore, not be necessary to hold any large number of *rupees* in the unified Reserve. These rupees—as formerly held in the Paper Currency Reserve—were of no avail in supporting the external value of the currency.

(a) *History of the P. C. Reserve*—Before describing the composition of the new Reserve, the *history of the Paper Currency Reserve* must be brought up to date. We have already seen how under the stress of the War the fiduciary portion of the Reserve was raised successively from 14 to 120 crores. The Babington Smith Committee gave some attention to this subject. It recommended that the statutory minimum for the metallic portion of the Paper Currency Reserve should be 40 *p.c.* of the gross circulation. The fiduciary limit of 120 crores might be continued for some time. The Committee laid down limits up to which securities of the Indian Government and of other Governments should be held. In recommending a *proportion* of 40 *p.c.* for the metallic Reserve the Committee suggested a radical departure from the principle of the Bank Charter Act of 1844 that had governed the Paper Currency Reserve since its formation in 1862. (2) The Committee also recommended that with a view to meeting seasonal demand for additional currency, provision be made for the issue of notes up to 5 crores over and above the fiduciary minimum, as loans to the Presidency Banks on the security of *export* bills of

exchange. (3) It recommended that the silver and gold should be held in India.

These recommendations of the Babington Smith Committee were at the basis of the Paper Currency Act that was consolidated in 1923. The only change that was made was, that instead of 40 *p.c.* the metallic proportion of the Reserve was fixed at 50 *p.c.* The actual constitution of the Paper Currency Reserve on 30th April 1926 was as follows.*

		Rs. crores.	The Gold Standard Reserve amounted to £40 millions. It was invested in sterling securities and British Treasury Bills. Since April 1923 the interest on these securities is being credited to the revenues of the Government. The Hilton Young Commission recommended, as before stated, the unification of
Silver coin ...	...	77·0
Silver bullion ...	...	7·7
Gold coin and bullion ...	...	22·3*
Rupee Securities ...	...	57·1
Sterling Securities.		21·0*	

* Converted at the rate of 2s per rupee.

the Paper Currency and the Gold Standard Reserves.

(b) *Principles of the New Reserve*—What should be the composition of the new reserve? Its first responsibility is the convertibility of the notes into *gold*. We have already seen how the new notes of the Reserve Bank are convertible into *gold* alone. For this purpose the Commission recommends 'the proportional reserve system' and, therefore, 40 *p.c.* of the notes in circulation will have to be backed by gold or gold

* Para 12 of the *H. Y. Com. Report*.

securities.

But the same Reserve is also to secure the *external* value of the rupee and the notes. We have already seen that the maximum amount that will be offered to the currency authority for conversion into gold will be measured by the total adverse balance of Indian trade. An uncertain factor in the contraction of currency is represented by the existence of the rupee hoards. It will not be fair to the Reserve Bank to be saddled with the responsibility of converting the rupees into gold. The Commission recommends the following arrangement for safeguarding the position of the Reserve Bank. There should be added to the liabilities, over and above the liabilities in respect of the note issue, an amount of Rs. 50 crores which is to be secured by assets in the same manner as if it formed part of the note issue. The Bank has the right of returning redundant rupees to Government in the proportion of four rupees for every five rupees worth of notes or gold or gold securities received from Government. Thus in course of time the rupee hoards will have been converted into gold at the cost of Government. Rs. 150 crores will be the minimum amount required for internal circulation. Thus the reserve would consist, to the extent of 40 *p. c.* of the notes issued, of gold and gold securities, *plus* Rs. 50 crores on account of outstanding rupees.

The constitution of the new Reserve is not to be left to be determined by executive discretion. The Commission recommends (1) that it should be *fixed by statute*. "This is a provision essential to any currency system in order to secure the automatic expansion and contraction of the currency and the compensatory effect of the exchange, in accordance with the needs

of the country.”* (2) Gold and gold securities should form *not less than 40 p.c.* of the Reserve. Normally the ratio would be 50 to 60 *p.c.* “Of its holding of gold coin or bullion, at least one half shall be held in the Bank’s custody in India, while the remaining half may be held outside India.”† The *gold securities* which it is lawful for the Reserve to hold include (a) gold balances at the Central Note Issuing Bank of a foreign country; (b) Bills of exchange of a maturity not exceeding 90 days bearing at least two good signatures drawn on and payable at a foreign money centre; (c) Securities of Governments other than the Government of India. Every opportunity should be taken to fortify the *gold* portion of the Reserve which should *never* fall below 30 crores of Rs. in view of the new notes being convertible into *gold* alone and the proposed introduction of the gold saving certificates. (3) Though Silver Reserves are ordinarily out of place in a gold standard system, the Commission recommends that in view of the genuine demand for rupees, a small amount should be kept, the limit being 25 crores of Rs. which is to be reached in 10 years’ time from the present magnitude of 87 crores (Aug. 1926). (4) The balance of the Reserve should be kept in Government of India rupee securities and self-liquidating trade-bills. The Government securities should be limited to 25 *p.c.* of the Reserve or Rs. 50 crores, which ever is less.”‡

A Reserve so constituted will secure the *internal* convertibility of Notes into gold as well as the *external* stability of the currency, when it is properly worked

*Para 77.

† Para 145.

‡ Para 81 of the Report.

by the new currency authority.

(II) REVIEW OF MEASURES FOR STABILIZATION: Taking a review of all the functions of the currency authority and the Reserve that is at its disposal it is possible to say that the Royal Commission has laid out a comprehensive plan for securing the stability of money—internal as well as external. "*The Gold Bullion Standard*" will make for the automatic contraction and expansion of currency and thus, by its compensatory action on the *volume* of currency, rectify any temporary disequilibrium between the internal and external value of money. Further elasticity is secured by a *Note-issue* convertible into *gold* and based upon the proportional reserve system. The internal currency has been simplified by ridding it of the disturbing influence of an excessive rupee coinage. The *Reserve* itself has been made more efficient in working by the amalgamation of the Paper Currency and Gold Standard Reserves. In operating this Reserve, a new *Central Bank* is recommended as a currency authority for the unified control of both currency and credit. The Central Bank will regulate the *credit policy* by means of its rates of discount and by direct operations in the bill market. Finally, this credit policy will be made more effective by the fullest control that has been given to the Central Bank in the *remittance of funds to London*.

(C) THE RATIO OF STABILIZATION

(12) THE TIME FOR STABILIZATION—Having explained the general theory and new mechanism proposed for securing monetary stability, it now remains to answer the practical issues that were raised

by the Royal Commission. Was the time ripe for stabilization? The answer depended to some extent upon the course of world prices, and also upon the state of India's external trade and financial condition. Regarding world prices, not only had the United Kingdom returned to the pre-war parity of the gold standard but the United States of America had declared its policy of keeping as closely as possible to a price level about 50 *p.c.* higher than the pre-war prices. The external trade of India was reaching its normal proportions and the financial position of the country was very sound. The Commission was, therefore, satisfied that the time was ripe for stabilization. It must be carefully understood that no body proposed to revert to the *pre-war* level of prices. Both England and America were maintaining a price level, nearly 50 *p. c.* higher than the pre-war level, and stabilization really meant an assimilation of domestic prices to the gold prices of England or America.

(13) THE RATIO OF STABILIZATION—Now the actual rate of exchange may either *over-value* the domestic currency or *under-value* it. It *over-values* when the domestic prices converted into gold prices at the prevailing rate of exchange are *higher* than world prices; it *under-values* when the domestic prices converted into gold prices at the prevailing rate of exchange are *lower* than world prices. If the *existing* exchange-rate were stabilized, therefore, it would mean stabilization at the *higher* domestic price-level when the exchange over-values, and at the *lower* domestic price-level when the exchange under-values the domestic currency. In the former case domestic prices must *fall*, and in the latter case they must *rise*. If instead of the existing rate *another*

exchange-rate was to be selected for stabilization, it will have to be *higher* than the existing rate if the actual rate *under-values* the currency, and it will have to be *lower* than the existing rate if the latter *over-values* the currency. When stabilization is effected at the *higher* rate, the resulting *fall* in domestic prices leads to what Prof. Gregory has called an *adjustment crisis*; when stabilization is effected at the *lower* rate, the resulting *rise* in domestic prices leads to what he calls *stabilization crisis*.*

No definite guidance can be obtained from the examples of European countries that have stabilized their internal currencies in relation to world prices. The German and Austrian currencies were stabilized at the current rates of exchange between 1922-24 which represented the *lower* value of their currencies. Prices in Germany and Austria had to *rise*, in consequence. On the other hand the Swedish and English currencies were stabilized at the pre-war parity which was *higher* than the current rates of exchange and, therefore, the English prices had to *fall*. The return of England to the pre-war parity of gold at the cost of monetary deflation and resulting fall in prices gave rise to a great controversy, and some writers, *e. g.* Prof. J. M. Keynes, wrote bitterly against the step. Prof. Keynes attributed the depression in the coal industry to the fall in prices and his attack is contained in the pamphlet: *The Economic Consequences of Mr. Churchill*, for it was Mr. Churchill who stabilized the currency at the pre-war parity. In selecting the 1s. 6d. ratio not only did India return to the pre-War parity but exceeded it by 2d. Perhaps India is the

* Read his *First Year of the Gold Standard*.

only country in the world that has stabilized its currency at a rate *higher* than the pre-War rate.

(14) THEORETICAL EXAMINATION OF A HIGH AND LOW RATE OF EXCHANGE—Before entering upon the controversy about the 1s. 6d. ratio let us first examine the effects of a high rate of exchange. They were examined by the Babington-Smith Committee which was generally in favour of a high rate of exchange.* A high rate of exchange really means *lower* internal prices and the question arises whether *high* prices or *low* prices are desirable. No categorical answer is possible. Different sections of the community are differently affected by a rise or fall in prices. Of the *agriculturists*, "those who have a surplus for sale would ordinarily profit by a rise in the price of the commodities they produce" but they will have to pay higher prices for imported articles. Those who have no surplus to sell but live on what they produce would not profit by the rise in prices but they will have to pay more for the other articles they buy. The class of farm-labourers—and labourers generally—stands to lose by a rise in prices, unless it is able to secure an increase in wages corresponding to the rise in prices. Finally, the large class of persons with fixed incomes, which would include persons living on rents, Government servants, professional men and pensioners, suffers by a rise in prices.

Consider next the effect of high rate of exchange on *Indian trade*. So far as the exports are concerned, a high exchange tends to check them. But the Babington-Smith Committee observed that some of

* Cf. Paras 44-54 of the *Babington-Smith Com. Report*.

the Indian exports, of which jute is the most important, are virtually monopolies with assured markets, while others such as tea, cotton, seeds and hides are articles for which the world demand is insistent despite the high range of prices, and, therefore, the Committee concluded that Indian trade is not likely to suffer any permanent injury from the fixing of exchange at a high level.

A high exchange stimulates imports into the country and we must next consider the effects of these on Indian *industrial development*. Here also the Babington-Smith Committee was of opinion that the industrial development will not be seriously hampered by a high rate of exchange. "A high exchange will tend to retain for India the advantage of a low cost for wages and raw materials, and in so far as nascent industries are dependent on imported machinery, plant and stores, they will benefit from the lower rupee prices payable for them." Finally, it is obvious that a high rate of exchange means considerable saving on the remittance of *Home charges* to England. At the rate of 1s. 4d., 45 crores of rupees are required to remit £30 millions to England; at the rate of 1s. 6d. 40 crores of rupees would be sufficient and thus there would be a saving of 5 crores of Rs. to the Central Government.

For these reasons the Babington Smith Committee was in favour of a high exchange rate per rupee. Now it is a curious fact that whenever the exchange value of the rupee was fixed the *higher* ratio was always taken. We need not go back to the efforts made by Government to appreciate the rupee from 1s. 1d. to 1s. 4d. in 1893-1898 before it was

stabilized at 1s. 4d. We have already seen how during the War the exchange was successively raised from 1s. 4d. to 2s. 10d. in sympathy with the rise in the price of silver. We have also seen how Reverse Councils to the extent of £ 55 millions were sold in supporting the exchange at the impossible ratio of 2s. gold and then 2s. sterling and then the exchange suddenly collapsed. For a time it was left to itself. But when the exchange began to rise from 1s. 1d. gold, it was allowed to pass successively the points of 1s. 4d. sterling, 1s. 4d. gold, 1s. 6d. sterling and 1s. 6d. gold at which point it was again stabilized. The history of the efforts made by Government conclusively shows the partiality of Government for the *higher* ratio. A high ratio means saving on remittances to England, encouragement to imports, and it also means more attractive terms to the British residents in India—official and non-official—to remit their savings and profits to England. Government as well as the European community are thus interested in keeping a *high* rate of exchange.

It is not suggested that the question is decided on such narrow or selfish grounds but their predisposing effect in favour of the higher ratio can not be gainsaid. Certain other arguments against the low rate were developed by the Hilton Young Commission. It refused to believe that the 1s. 4d. rate was a 'natural' rate. It was said that the lower rate is *easier* to maintain when the balance of trade becomes unfavourable because the contraction of currency has to be effected to *less* extent. To this the Commission replies: "Provided the gold and gold securities reserves are sufficient to prevent their

exhaustion before the necessary contraction of the rupee circulation has been brought about, we see no ground for thinking that, with the establishment of a central currency and banking authority with full power to make its credit policy effective, it will be more difficult to maintain exchange at 1s. 6d. than 1s. 4d.* A minor argument in favour of the higher ratio was furnished by the effect of the ratio on the safety of the rupee coinage. Should the price of silver again rise, the higher rate will provide a wider margin. To this it has been answered that if the price of silver *does* rise, it will as easily endanger the rupee at the lower as at the higher rate. Perhaps the greatest argument in favour of the lower rate is that it will lessen the competition of foreign imports and give breathing time to our struggling industries. It is no use going in for a Protectionist policy if at the same time our industries are to be exposed to fierce foreign competition. Some light is thrown on this subject by the Report of the Tariff Board on textile industry. Unfortunately the Board is divided on this point. Two members held that the stabilization of the rupee at 1s. 6d., coming as it did at a time of falling prices, rendered the disparity between prices and wages more acute, though it did not directly affect the textile industry. The Tariff Board says that a high exchange may affect the industry in two ways : (1) by a failure of wages to be reduced *pari passu* with the falling prices ; (2) by a reduction in the purchasing power of the cultivating classes which are the chief customers of the mill-made cloth. Regarding (1) it must be noted that falling prices also mean some saving on

* Para 200 of the *Majority Report of the Hilton Young Com.*

the price of raw cotton and mill stores. But these two items between them constitute only between 55 to 66 p.c. of the total outlay on cloth-manufacture. The balance represents wages which it is very difficult to reduce, and their burden was particularly felt when the price of cotton-manufactures began to fall on account of the competition of imported cloth. As for (2), two members of the Board held that the diminution in the purchasing power of the agriculturists was not peculiar to India. We have seen that the prices of the agricultural commodities rose *less* than that of manufactured articles. After paying for land revenue, interest, rent and agricultural wages—the principal items of expenditure to a cultivator,—*less* was left in his hands for the purchase of commodities like kerosene, hardware and cloth.

The third member of the Board—Raja Harikishan Kaul—on the other hand held that even a *small* reduction in the number of rupees that the cultivator gets for his produce considerably diminishes his power to purchase cloth which is the only important article with a variable price that he buys in the market.* He was, therefore, satisfied that the high exchange *did* contribute to the present depression by intensifying the burden of high wages and at the same time crippling the purchasing power of the most numerous class of customers for the products of Indian textile mills.

The division of an expert body like the Tariff Board on this question forcibly points out the danger of dogmatizing on it and the question may be left here without its being forced to lead to one or the other conclusion, and we may now proceed to glance at the Battle of the Ratios.

* Cf. Report of the *Tariff Board on Indian Textiles* : pp. 73-76.

(15) IS. 6D. VS IS. 4D.—Before doing so we must make it quite clear that it is impossible to do adequate justice to the many issues raised in the controversy about the ratios in a book like the present. The controversy really turns upon the interpretation of the movement of prices, wages, and the rates of exchanges. The relevant statistics are difficult to compile and more difficult to interpret. The same sets of figures may give rise to different conclusions. Nothing more is attempted here than presenting the two sides of the controversy. The relevant statistics are given in the following tables.

Indian Exchange and Prices.*

	Exchange						
	Dollar-Sterling Exchange		Rupee-Sterling Exchange			Rupee-Dollar Exchange	
	\$	% Gold parity	Sterling	Gold	% Gold parity	\$	% Gold parity
July 1922	4.45	91.5	15.67	s. d. 1 2 $\frac{1}{2}$	90	28.89	89
Dec. 1922	4.62	95.0	16.00	1 2 $\frac{3}{4}$	95	30.65	94
June 1924	4.32	86.8	16.99	1 2 $\frac{1}{2}$	94	30.49	94
July 1924	4.37	89.8	17.19	1 3 $\frac{1}{8}$	96	31.25	96
Aug. 1924	4.50	92.5	17.24	1.4	100	32.26	99
June 1925	4.86	99.9	18.05	1 6 $\frac{1}{16}$	113	36.48	112
Feb. 1926	4.86	99.9	18.19	—	114	—	—

* Table from Para 94 of the *Minority Report* of Sir Purshottamdas.

WHOLESALE PRICE INDICES

	U. S. A. 1913= 100	U. K. 1913=100		Calcutta July 1914=100		Bombay July 1914=100	
	Gold	Sterling	Gold	Rupee	Gold	Rupee	Gold
July 1922	155	160	146	181	163	190	171
Dec. 1922	156	156	148	176	165	175	164
June 1924	145	163	145	176	165	185	—
July 1924	147	163	146	179	172	184	—
Aug. 1924	150	165	153	180	180	184	—
June 1925	157	158	158	157	177	160	—
Feb. 1926	155	149	149	158	180	152	—
May 1926	152	145	—	—	—	151	—
Nov. 1926	148	152	—	—	—	146	—
Feb. 1927	146	143	—	—	—	148	—
May 1927	144	140	—	—	—	148	—

From the statistics the Royal Commission draws the conclusions : "From December 1922 to June 1924, the gold exchange value of the rupee remained fairly stable round 1s. 3d. gold. During the same period the rupee price level, as measured by the Calcutta wholesale index figure, remained fairly steady round 176. From July 1924 to Jan. 1925 the rupee rose sharply to the neighbourhood of 1s. 6d. gold, and

since the end of May 1925, it has been held within the 1s. 6d. gold points. From July 1924 to June 1925 the rupee price level fell from 179 to 157 and has then varied between the limits of 163 to 153. But the level of world prices, as indicated by the wholesale price index figures of the United States and United Kingdom was approximately the same in December 1922 and June 1925. It is natural to conclude that, during the period of change, there was a mutual adjustment of prices and exchange, and that a substantial equilibrium was attained about the middle of 1925 and has been since maintained.*

As against this, it was the contention of Sir Purshottamdas Thakurdas in his minority report "that the greater part of the general adjustment to 1s. 6d., by a fall, is still to come."† He admits that the world-price remained at the same level, namely at 155 in July 1922 and February 1926. "The gold parity of the rupee was 90 in July 1922 and 114 in Feb. 1926, *i.e.* an increase of 27 *p.c.* The Calcutta index number was 181 in July 1922 and 158 in Feb. 1926, *i.e.* a fall of 23 points. But on a 27 *p.c.* increase in the gold parity of the rupee, a fall of 49 points was called for to bring about complete adjustment of Indian to world prices. The actual fall, however, was 23 points. In other words a fall of 26 points, or more than half the adjustment, was still to come in Feb. 1926."‡

Having satisfied itself that the prices were in adjustment with the 1s. 6d. ratio, the Commission

* Para 182-183.

† *Minority Report* : para 97.

‡ Para 75 of the *Minority Report*.

anticipated the gravest danger in reverting to the ratio of 1s. 4d. This would mean a rise in prices of $12\frac{1}{2}$, a reduction of real wages, a demand for the remittance of funds to England while the exchange was higher and a subsequent, retransfer of funds to India at the lower rate, loss on the remittance of funds on behalf of Government, consequent dislocation of the finances of the Central Government and postponement of the remissions of the provincial contributions.

Sir Purshottamdas, on the other hand contented that as the adjustment was still incomplete, a reversion to the 1s. 4d. ratio was demanded by every consideration. He attached little importance to the argument that the *fact* of a steady exchange was a *proof* of adjustment. He maintained that the exchange was *kept* at the high level by a contraction of currency to the extent of 43 crores in the four years 1921-25. He referred to the correspondence that passed between the Government of India and the Secretary of State and showed how the latter was for a high rate. He complained against the *manner* in which the ratio was stabilized at 1s. 6d. by administrative action even while the Commission was making inquiries. A reversion to the ratio of 1s. 4d., according to Sir Purshottamdas, would *prevent* the prices from falling, remove the depressing effect on industry, and on the whole help those who are engaged in production, *i.e.* nearly three-fourths of the Indian population.

When we speak of adjustment of internal prices to the world prices we must include in the prices not only *commodity* prices, but also wages, interest, and rents and other payments as well. Even in *commodity* prices, the prices of export commodities will be the

first to fall as a direct result of the overvaluation of the exchange; this fall will be transmitted to other *commodities* in course of time. This will be the first stage of adjustment. The next stage of adjustment is that of wages to the falling prices. The conclusion of the Majority of the Commission was that both agricultural and industrial wages had adjusted themselves to the prevailing level of prices. The Majority admitted that wages in the cotton-industry were *higher* than justified by the cost-of-living index numbers, but it did not think it expedient to *lower* the exchange to remove the maladjustment. "The ultimate effect would merely be, by inflating the currency to the extent of $12\frac{1}{2}$ p. c., to produce a concealed reduction in wages of an equivalent percentage. Even if this would secure the desired equilibrium, which seems highly improbable, we do not regard it as sound policy to use the currency as lever to reduce real wages. Any adjustment of wages thus brought about would be arbitrary in extent as well as temporary in character. Inflation is a dangerous expedient, which has often been advocated, and sometimes deliberately applied, in other countries for similar purposes, but it has always been found to carry nothing but evils in its train. The prosperity of an industry depends on the soundness of its internal economy and its adaptability to changing conditions ; and any basic unsoundness in its economic conditions cannot be rectified by a mere change in the ratio of exchange."*

The contention of Sir Purshottamdas was that the wages were still *higher* than justified by the price level and as such they imposed an unbearable burden

* *Majority Report* : para 193.

upon industries. "Industries generally in India are still suffering from the prevailing depression. An adjustment in wages to the 1s. 6d. basis, if it has to be enforced, will therefore entail a long and bitter struggle between Labour and Capital, with consequent disturbance in the economic organization of the country."*

Turning to *contracts*, the important forms affecting the agricultural community are the payment of land revenue and interest on debts. The land revenue was fixed (before the present changes in the exchange) on the basis of prices corresponding to the 1s. 4d. ratio. But the Commission does not think that the 1s. 6d. will inflict any hardships upon the cultivators. "It is true that many of the current land revenue settlements were made during that period (*i.e.* of 1s. 4d. exchange) because generally speaking the normal term of these settlements is 30 years; but in view of the great rise in prices since 1914 the real incidence of land revenue, measured in terms of commodities, has been very materially lightened, and we cannot regard a 1s. 6d. ratio as constituting a hardship in this respect."† Regarding the long-term debtor, the Commission observes: "After the prolonged disturbances which have taken place, it is impossible to do absolute justice to the long-term debtor and creditor by fixing on any particular rate of exchange. In any case these long-term debts form only a small part of the total contracts outstanding. The great bulk of the contractual obligations incurred under modern conditions consists of short-term contracts, and so far

* *Minority Report* : para 110.

† *Majority Report* : para 194.

as these short-term contracts are concerned, it is reasonable to suppose that they originated, for the most part, when conditions were based on the 1s. 6d. rate, or in any event after exchange had broken away from 1s. 4d.”*

With regard to contracts Sir Purshottamdas contends that the ordinary commercial contracts are of short duration but the agricultural debt of the country is of old standing. We have already seen that it is about 600 crores of Rs. for British India according to Mr. Darling. “It is probably another 200 crores on the Indian States. As the rate of exchange between 1900 to 1917 was around 1s. 4d. it is only right to assume that most of this debt of 800 crores was contracted when the rupee was 1s. 4d. gold. Now to put on the statute book 1s. 6d. gold would practically mean putting a burden of 12½ p. c. on these borrowers, and this is a class whose contracts ought to come in for full consideration in any decision to stabilize the rupee. Under the heading of Contracts, therefore, the higher figure of 1s. 6d. has little to recommend it, and very much against it.”*

It will thus be seen that the difference between the Majority of the Commission and Sir Purshottamdas was as to the *fact* of adjustment: adjustment not only of *commodity* prices, but of wages, etc. to the prevailing price level. We must leave the subject here in the hope that the adjustment *has* taken place. If it has not, the danger of maladjustment—if there be any—will be

* *Majority Report* : para 196.

† *Minority Report* : para 127.

intensified by the uncertainty of the movement of world prices. If the gold prices themselves fell, there would be a corresponding *further* fall of the rupee prices. As Sir Purshottamdas says: "If gold prices fall,—and Indian prices must follow such a fall—India will be faced with a still bigger fall—the double effect of the operation of the present rate of 1s. 6d. and also the world fall. I cannot but contemplate such a prospect with very serious misgivings, for it will hit the Indian producer to an extent beyond his capacity to bear. In a word, it will hit, and hit very hard, fourth-fifths of the population of the country that exists on agriculture."*

(16) CONCLUSION—Is the Ratio Question really so important? That depends. In one sense the controversy is no longer of *practical* significance because after a great deal of agitation in the country and protracted debates in the Legislative Assembly the ratio 1s. 6d. has been put on the statute book. Again, as the whole controversy is about the *fact* of adjustment, experience alone will show who was in the right. If no serious losses are incurred by the country as a result of the adjustment of internal prices to the higher ratio, the question of ratio will be a dead issue. If, on the contrary, the process of adjustment leads the country to ruin—financial and industrial—the issue is bound to revive. Then the ratio will bring into discredit the whole currency policy of Government. Then the apprehensions of Sir Purshottamdas will be justified. He foresees no breakdown of the gold bullion standard, given, of

* *Minority Report* : para 98.

course, good monsoons, if the lower ratio is adopted. But if the higher ratio is adopted "India will be faced during the next few years with a disturbance in her economic organization, the magnitude of which is difficult to estimate, but the consequences of which may not only hamper her economic development but may even prove disastrous."* Then the whole system will once again go into the melting pot. Let us wait and see.

* Para 157 of the Minute of Dissent.

PART IV

DISTRIBUTION

CHAPTER XVIII

SOME TOPICS IN DISTRIBUTION

(1) NATIONAL DIVIDEND IN INDIA—It is not proposed to deal with all the problems of distribution of wealth in India in this part of the book. Limitation of space is one consideration. Another is that the pressing need of the time is the *production* of more wealth, for it will be seen that there is not enough wealth to satisfy the most elemental—and also elementary—wants of the vast Indian population. Some analysis has already been made of the causes of low productivity—in agriculture as well as in industries. Even of the wealth that is produced an appreciable proportion is wasted in various ways, in religious and social festivals and observances, and on litigation. There is no doubt that people must improve their general mode of life to make the most of the existing wealth.

Much attention is being lately paid to the computation of 'National Wealth' and 'National Income'. The War has left a legacy of huge national debts in European countries and there the question of the 'taxable capacity' has become one of practical importance. Again, there are proposals for levying a general tax upon capital, and even more radical proposals of a socialistic character for the redistribution of the existing wealth. In India the question

assumes importance, to some extent, with reference to the burden of taxation, but mainly because of the well-grounded fear felt by many authorities that the total annual production of wealth falls dangerously short of the minimum requirements of the population. Let us make a rough estimate of this annual production of wealth. We shall be guided by the most careful and recent effort made in this direction by Shah and Khambatta in their *Wealth and Taxable Capacity of India*. 'The economic condition' of the people also attracted the attention of the Indian Legislature and in 1925 the Indian Economic Enquiry Committee was appointed. This Committee merely examined the fundamental principles on which such an enquiry should proceed, but was prevented from coming to any definite conclusion with regard to the economic condition of people, partly on account of its limited terms of reference and partly on account of insufficiency of the available statistical material. Indeed the main recommendation of the Committee was that an elaborate organization should be created for the collection and co-ordination of statistics.

For knowing the economic condition of a people an estimate of national *wealth* is not so useful as of national *income*. The former is the total stock of goods—"It is the aggregate of wealth of the individual citizens of the State as well as the corporate or communal wealth represented by such assets as national railways and municipal water-works."* Sir Josiah Stamp defines national wealth of a country as "the value of the objects found within its boundaries, including the wealth of the inhabitants."† Estimates

* Report of the *Indian Economic Inquiry Com.* : p. 9.

† Sir J. C. Stamp: *Wealth and Taxable Capacity*. : p. 7.

of national *wealth* are formed from statistics of taxation (where adequate), or by a regular inventory of that wealth.

But it is the national *income* that is more significant, for it is the *flow* of utilities that results from the *fund* of national wealth. Sir Josiah picturesquely compares this national income to a national 'Heap' of "all *services* and *goods* that are produced by us as a community in a year"—containing "everything that can be given by us whereby we have a claim upon the work of our fellow-men who are contributing to the heap, including the services of those who have helped to make the heap larger than it would or could be if we started afresh without the assistance of piled up capital-goods saved from the heaps of former years."* It will be seen that *services* are included in this heap. But there are practical difficulties in computing the *money-values* of many services and also of determining whether certain services should or should not be included. We may simplify matters by taking *commodities* only. It is the production of such *commodities*—say in a year's time—"which forms the basis of the sustenance and comfort of the people."† We may confine the term 'national dividend' to this aggregate of *material* production, reserving the term 'national income' for the larger aggregate including *services*. Ordinarily, of course, the terms 'national income' and 'national dividend' are regarded as convertible.

Having made clear that 'national dividend' consists of the *material* production of a community—say for

* Sir J. C. Stamp : *Wealth and Taxable Capacity* : p. 43.

† Report of the Econ. Enquiry Committee : p. 7.

one year—we now proceed to compute it in the case of India. The immense difficulties of the task are obvious. In the first place we must compute the total *wealth* produced; secondly, we must convert it into *money value*; and thirdly we must examine the mode of its *distribution*. The requisite statistics are absent, inadequate or imperfect. The annual wealth as well as the prices are *variable*. It will not be easy to examine the *dynamic* view of national dividend, *i.e.* whether it is increasing or decreasing. The national dividend for the whole period 1900-1926 has been computed by Shah and Khambatta. We shall only take this dividend for the year 1921-1922. Everywhere we shall closely follow the figures of these two authors.

Agricultural Crops—We must ascertain the production of the principal food and non-food crops, as well as minor crops and mixed crops. The *yield* of the crops must be found. The production of fruits and vegetables must be taken into account. The figures must be supplemented by those for the production of other pastoral products, *e.g.* cattle, sheep, etc., hides and skins, bones, horns; wool; poultry and eggs; honey, bees-wax; game of all kind. Next we have production of wealth from *forests*; then *fisheries*; then *mineral* production; then the production of *industries*—large-scale as well as cottage industries.

As said before, we shall consider the production in the year 1921-22 and evaluate it at the scale of prices prevailing in that year. The results of such a computation made by Shah and Khambatta may be presented in the table that follows. It should be noted that the whole of India (including Burma and the Indian States) have been taken into account.

Though it is comparatively easy to find the production and value of the main crops, to do so in the case of the minor crops—some very important—becomes nearly impossible. The production and value have to be *inferred* from figures about exports, or from other independent sources. Thus re. *Fodder Crops*, the total yield has been put down at 84 million tons and evaluated at Rs. 15 per ton=126 crores of Rs. in 1921-22.

Re. *Vegetables and Spices*—the total area under them has been estimated to equal 6.1 million acres, and taking the average value of the outturn at Rs. 300 per acre the total valuation=183 crores.

Messrs Shah and Khambatta have dealt with the income from cattle and other animals in an interesting way. The *gross* income from cattle they calculate thus :

Hides and Skins.	18 crores	At the same time
Bones, horns ...	2 „	they calculate that the
Manure ...	45 „	<i>cost of upkeep</i> of the
Meat ...	32 „	cattle and animals
Milk and milk		comes to about Rs. 228
products ...	130 „	crores.
Additions to live		
stock ...	8 „	

Rs. 235 crores

Thus the *net* income left is only the small sum of 7 crores. This means that the cattle are just useful for services on the fields, that in many cases they are more of a burden to the ryot than a source of profit. But if we neglect the *net* income from cattle in our final estimate of total production, we must remember

that that income is *entirely* available to the ryot, and we need not make any further deductions from it for the maintenance of the cattle.

Forests—Here also finding the quantities and their values becomes difficult. Taking all products—timber and fuel, grazing, minor produce, and such articles as lac, rubber, myrabolums, etc.—the total value has been put at 28 crores of Rs.

Fisheries—Roughly, the annual value has been put down at 3·2 crores of Rs.

We may tabulate the production and value of the main agricultural crops in 1921-22 thus:

	Food Crops			Oil Seeds		
	Quantity million tons	Price Rs. per ton	Value Rs. crores	Quantity 1000 tons	Price Rs. per ton	Value Rs. crores
Rice	35.1	198.5	696.7	476	258	12.1
Wheat	10.0	206.7	206.7	745	310	23.0
Barley	3.5	136.0	47.6	1262	228	28.7
Jowar	7.3	160.4	117.1	970	212	20.5
Bajra	3.6	187.6	67.5	820	126	10.3
Ragi	3.5	117.0	41.0			
Maize	3.0	157.7	47.3			
Gram	5.8	176.8	102.5			
Other food						
grain & pulses	10.5	—	147			
Total Food Grain	82.3	—	1473.4	4273	—	94.6
Sugar (gur)	2.8	340	95.2			11
Other sugar	—		.5		Total	105.6
Total Food crops	85.1		1569.1			

Fibres			Drugs & Narcotics		
Quantity million bales of 400 lbs	Price Rs. per bale	Value crore Rs	Quantity	Price	Value crores of Rs.
Cotton	4.4	79.2	Opium Chest of 140 lbs. Tea million lbs. Coffee Tobacco— maunds millions. Other drugs ...	14,300	4.6
Jute	4.0	25.8		274	15.4
Other fibres ...	—	2.3		37.2	2.0
Total fibres...		107.3		12	20.4
				—	1.4
Dyes & Tans			Total...		
000 cwts	per cwt	Value crores Rs.	Condiments & Spices		
Indigo	68	4.2	1000 tons	Rs. per ton	crores
Other sub- stances ...	—	.4	Betel nut	174	4.8
Total...		4.6	Chillies ...	112	5.0
			Ginger ...	8.4	.5
			Pepper ...	30.2	1.8
			Others ...	172	4.3
			Total...	497	16.4

We may sum up the total values of agricultural production thus* :—

	Rs. (crores)		Rs. (crores)
Food-grains	1473.4	Total Agri-	
Sugar	95.7	cultural Income...	2156
Fruit & vegetable ...	183.0		
C. ndiments & spices.	16.4	Less (on account	
		of seed) ...	58
Total food crops.	1768.5		
Oil seeds	105.6		Rs. 2,098
Fibres	107.3	Plus Forests ...	28
Dyes & Tans... ..	4.6		
Drugs & Narcotics ...	43.8	„ Fisheries ...	3.2
Fodder crops	126.0		
Total agricultural	= 2155.8		Rs. 2129

We must *deduct* from this total the value of grain used as seed, which is a big item valued at Rs. 58 crores. The deterioration of land may be neglected on the supposition that land recuperates itself; the depreciation of agricultural implements would be a small item; and we have already seen that the depreciation on account of live stock is set off by the *indirect* income that is got from cattle in various forms. Thus the *net* agricultural production would be 2098 crores of Rs.

In evaluating the wealth produced in manufacturing processes, we are only concerned with the *addition* or *accretion* of value that takes place in the conversion of raw material into finished product. We must, therefore, *deduct* from the value of the

finished product the value of the raw material. A list has been given in the appendix of the main industrial establishments in the country. By computing the value of total production and allowing for the value of the raw material consumed (a work of much ingenious calculation) the following figures have been given by Shah and Khambatta for 1921-22.

	Rs. (crores)	
Cotton manufactures	53	We must next consider the <i>addition</i> of wealth made by the cottage industries which, as we have seen before, are an important feature of our industrial organization. The <i>gross</i> value of production of hand-loom weaving alone was estimated at Rs. 50 crores by the Indian Industrial Commission and we may take 25 crores as its <i>net</i> addition. The <i>net</i> production of all other
Jute	15.0	
Wool & woollen	4.1	
Silk & silken	.4	
Food & drink (mainly, refined sugar, tobacco manufactures, spirit and liquor & flour)	52.0	
Leather	6.0	
Paper & printing	3.4	
Manufactures from wood, stone, glass & cement	4.1	
Power supply	3.0	
Engineering and miscellaneous	5.0	
Total	146.0	

handicrafts may be put down at Rs. 15 crores.

According to the principle we have followed in calculating national production, we cannot add the value of house sites, etc. or the rentals. But we must take into account building operations undertaken in a year and find the value they *add*, say roughly Rs. 20 crores in 1921-1922.

Regarding *mineral wealth*, from the figures given in the statistical appendix an idea can be gathered of the value of its annual production, roughly, say Rs. 28·75 crores in 1921-22. So that the total value of industrial production in 1921-22 was :

Manufacturing industries...	146	crores.
Handicrafts & Cottage ...	40	"
Mineral Wealth ...	28·7	"
Buildings, etc. ...	20·3	"

Total = 235·0

Adding up values of agricultural, forests, fisheries, manufacturing, mineral and building production we get the grand total of Rs. 2364 crores. If we divide this by the total Indian population in 1921 namely 31·9 crores, we get a per capita income of Rs. 74 per annum.

In arriving at the total 2364 crores we have allowed (roughly) for the cost of production. But the whole of this income is *not* available for distribution among the *Indian* population. For out of this aggregate India has to pay a considerable portion on account of various political charges and economic services and we may now form a rough estimate of these deductions.

The amount of taxation raised by the Central, Provincial and Local self-governing bodies in British India, as well as the revenues of Indian States must ultimately come from this national dividend. We may put the aggregate revenue as 375 crores of Rs. (300 for British India and 75 crores for the Indian States). But the whole of this is not a deduction, for a large portion—in fact the major portion—is returned to the people in one form or another, *e.g.*

salaries, payment for materials, services, etc. But the expenditure on account of 'Home charges' is not of this character. It is payment for services rendered (but we are excluding all *services* from account) or for stores purchased. The stores are no doubt material. But their exclusion may be set off by the circumstance that the payments made to non-Indian officials living in India amount to a deduction as the officials leave the country after retirement. Whether the 'Home charges' constitute an economic drain is an eternal subject of controversy and it will not be possible to go into it here. As we are generally following the figures given by Shah and Khambatta, we may put down the deduction on this account at Rs. 50 crores in 1921-1922.

The other payments which India has to make are of an economic nature and are referable to the following four heads: (1) Payment of interest on foreign capital invested in India in and through private agency. We are thus excluding *Government* borrowings—for productive or unproductive purposes—and also *profits* on these private foreign investments. The difficulty is of ascertaining the amount of foreign investments. Prof. Shah would put it at £600 millions, and if we calculate interest at 6 *p.c.* the annual interest charge comes to 54 to 55 crores. To this we may add 5 crores as interest on capital invested by foreigners in companies *registered in India*. Thus the total interest charge is Rs. 60 crores.

(2) Next we have payments made by India on account of shipping services—both in cargo and passengers, in overseas as well as coastal trade. From the total tonnage engaged in the overseas and coastal trade, Prof. Shah puts this payment at 22

crores in the case of the former and 10 crores for latter. To this we must add 10 crores for the carriage of Indian passengers. Thus the total bill would come to 42 crores of Rs. (3) Then thirdly, we have payments on account of commissions for banking and allied services in connection with our foreign external trade which is almost wholly managed by foreigners and therefore, form a deduction. If we put it at $2\frac{1}{2}$ p.c. of the total trade (roughly equal to 600 crores) we get a bill of 15 crores.

(4) Lastly, we have profits and earnings of foreign merchants, professional men and the savings of high Government officials remitted to England. Prof. Shah calculates the profits to be equal to 50 crores (5 p.c. on £650 millions), earnings of professional men at 2.5 crores and savings of officials at 2 crores or in all Rs. 53.25 crores.

From the nature of the calculations the figures for deductions are rough estimates only. Even if they be reduced considerably, they constitute a *deduction* from the national dividend. They forcibly illustrate the serious deficiencies in our economic development and organization, deficiencies that not only *retard* the fullest utilization of our natural resources for *our own* benefit, but exact in addition, a heavy tribute from what little is produced. The remedy lies in an all-round *industrial, commercial and financial* development.

Thus the total deductions amount to :

Home charges	...	...	50 · 0	Rs. crores
Interest on foreign capital...	60 · 0			"
Shipping services	...	...	42 · 0	"
Banking Com. ...	...	...	15 · 0	"
Profits, etc.	...	...	53 · 0	"

Rs. crores.... 220 ·

If we deduct this from the ground total of 2364 crores we get the net income of 2144 crores *available for Indians*. This will work out at a per capita income of Rs. 67. Now if we take Rs. 7 as the *minimum* cost of food *alone* per head, the total cost will be Rs. 84 per year. The income, as it is worked out, falls short of the minimum for *food alone*. When we consider that the rich have a larger *share* of this income, and that even the poorest *have* to spend something on housing, clothing and other needs of human life, the conclusion is forced upon us that a large section of the Indian community must be having *less* than the bare means of subsistence.

(2) SHARE OF THE LAND-HOLDER, THE MONEY LENDER AND THE STATE IN THE PRODUCE OF LAND : In chapters VII, VIII, and IX some account has been given of the *production* of agricultural wealth, of the question whether it is keeping pace with the demands of internal consumption and exports, of the main difficulties it is suffering from and of the directions in which improvement is desirable and necessary. We shall now consider here, very briefly, whether the distribution of the wealth produced is satisfactory, and if it be not so whether the unsatisfactory distribution is reacting prejudicially upon agricultural progress.

Broadly, the agricultural community consists of the rent-receiving land-holders, the cultivating proprietors, the non-cultivating tenants, the cultivating tenants, and the agricultural labourers. Let us see how far these classes assist each other, for it is obvious that agricultural prosperity is dependent upon their co-operation. Take the *rent-receiving land-holders*. Now a remarkable change that is taking place in our rural organization is the steady *growth* of a rent-receiving

land-lord class. In Bengal the chain of middlemen between the cultivating ryot and the big Zamindar who pays a fixed revenue to the State is lengthening by the process of sub-infeudation. With regard to the Punjab—a province of peasant proprietors—Mr. Calvert found “that the number of tenants is increasing, that the area cultivated by tenants to total cultivated area is increasing, and that cash rents are decreasing in proportion to kind rents.”* The same tendency has been noticed in Madras, Central Provinces, and Bombay. Only in Assam, Bihar, Orissa, Burma and the United Provinces the cultivating class has *increased* when compared to the rent-receiving class. But in Assam the increase was slight, in Bihar and Orissa it was due to changes in classification and in the United Provinces it was due to a number of agricultural labourers turning themselves into cultivators, on account of a rise in wages which attracted more persons to cultivation and enabled them later on to become cultivators. We need not analyse now the *causes* of the rise in rentals. They have been broadly indicated in dealing with the greater competition for land. The fragmentation of holdings also tends to increase the number of non-cultivating proprietors. Leaving aside these petty proprietors, and confining ourselves to the more substantial class of Zamindars and land-holders, it must be said that as a class, they have not realized their responsibilities of proprietorship of land. They have been content with the passive rôle of receiving rents—which they take every opportunity to increase—and spending their incomes in the towns. The evils of

* H. Calvert : *Wealth & Welfare of the Punjab* : para, 86-87.

absentee landlordism are patent to all. Wealth that should have been intelligently and productively employed for promoting agriculture is unproductively used in the towns. In other countries the landlords have been the pioneers of agricultural reform. In India that class must recognize its social obligations and justify its right of property by actively participating in the improvement of agriculture. Not only the proprietors but even the tenants are taking advantage of the competition for land to shift upon the needy the toil of cultivation and, by creating a class of sub-tenants under them, to live as mere rent-receivers.

The State had to intervene at a very early stage to protect the cultivators and tenants from the rapacity of their landlords and we have seen a considerable volume of legislation bearing on the subject. It is impossible to go into the details of the work which will be found given in Baden Powell's monumental work on Land Revenue Systems of British India in 3 volumes. The Bengal Tenancy Acts of 1859, 1885, 1907 protect the status of the ryot who has held all classes of tenants in Bengal. The ryot thereby a right of occupancy and 80 to 90 per cent of the produce. Such ryots cannot be evicted nor can their rents be arbitrarily enhanced. In the United Provinces also tenancy rights are important. In the Agra Division the Agra Tenancy Act of 1901 recognizes the 'occupancy right' and an occupancy tenant is not liable to eviction except for default in payment of rent, while the rent payable cannot be enhanced except by mutual agreement or by order of the revenue court, generally on the ground that it is below the

prevailing standard of rent for similar land. The Act of 1901 also made the ejection of those tenants who were not 'occupancy' tenants more difficult.

A landholder who parts with his proprietary rights obtains occupancy rights in his home farm at a privileged rate of rent, 25 *p.c.* below the rate generally payable by non-occupancy tenants. This is called 'ex-proprietary right'.

In Oudh the so-called "occupancy tenant" corresponds to the ex-proprietary tenant in Agra, and no tenant acquires occupancy rights by prescription; the rent of the occupancy tenant cannot be enhanced beyond a rate $12\frac{1}{2}$ *p.c.* lower than that paid by tenants-at-will, but the Act provides that, when the rent of the non-occupancy tenant is enhanced, the occupancy tenant shall be entitled, as a general rule, to hold the land at the enhanced rent for a term of not less than 10 years. In Oudh any person admitted to the cultivation of land acquires certain rights; he is entitled to hold the land for seven years at the same rent, and his right of holding the land at the end of that period is limited to $6\frac{1}{2}$ *p.c.* In Agra, however, tenancy is much less important than in the other provinces, or Bengal, though it is now increasing. In Agra a fifth of the class of tenants have been recognised as occupancy tenants, and the remaining tenants are tenants-at-will. In Bengal, on the other hand, no limit is fixed to the discretion of the landlord in the matter of enhancement, but the procedure to be followed in ejection, and the grant of compensation for improvements legally executed, are provided by law in respect of both classes of tenants. In Madras, there was a large body of tenants in the permanently settled Zamindari

districts and its position was clarified and safeguarded by the important law known as the Madras Estates Land Act of 1908. It recognizes the 'occupancy ryot', and such a ryot cannot be evicted so long as he pays the established or prescribed rates of rent. The occupancy tenure is heritable and transferable. Enhancement of rent is permitted only within certain clearly defined grounds, and then only by suit before the Collector. A non-occupancy ryot may acquire occupancy rights by the payment of a sum equal to $2\frac{1}{2}$ years' rent. Non-occupancy ryots also are protected in respect of enhancement of rents and ejectment. The Act further casts upon the land-lord responsibility for the repair of irrigation works, survey of estates, preparation of record of rights. Thus the Madras Estates Land Act of 1908 embodies the accumulated experience of Government in tenancy legislation and is a model law of its kind.

It will be seen from this *résumé* of tenancy legislation in provinces that in the first place it makes a distinction between occupancy and non-occupancy tenancy. The qualifications for the acquisition of occupancy rights, of course, differ in different provinces, though their essence lies in unbroken tenure of land for 12 years. And secondly, the legislation places restrictions upon the enhancement of rent which, in the case of occupancy tenants, can only be increased by agreement or by lawsuit.

But the protection of tenancy legislation has not been extended to tenants in the *ryotwari* provinces and these tenants who are little better than tenants-at-will are subjected to the unfair exactions of the landlord. It is said that competitive rents make for agricultural progress. On the other hand any protection that is

given to the tenant by law or custom makes him to that extent lazy and unprogressive. This may be so in Western countries where agriculture is only *one* out of many occupations that are open to the population. But the theory of 'high rents' cannot be applied to Indian conditions. At the same time the cultivating tenants must be educated to put forth their best efforts to improve their land and increase its produce, seeing that they will get the full fruit of their improvements as well as of the enhanced production.

Tenancy legislation, is therefore, necessary in India, in the interests of the tenants as well as the proprietors. But even though it may moderate *rents* it will be of no avail against that considerable deduction from the total produce which the cultivator has to suffer on account of payment of *interest* to the *sowkar*. We have already dealt with the subject of rural indebtedness and its remedies (pages 199-229) and it need not be pursued here. It is obvious that unless this big hole in the purse of the cultivator is closed, no permanent prosperity of the cultivators is possible.

But supposing we had moderate rent and an equally moderate outgoing on account of interest, a third deduction from the produce of the cultivator must also become *equally* moderate if the cultivator is to retain in his own hand and for his own enjoyment the fruit of his labour—the deduction, namely, on account of land revenue. This is a big subject. We shall leave aside its historical and administrative aspects, and consider it so far as it is a *burden* upon the cultivator. Now one of the most difficult problems in Indian Economics is to determine the incidence of land revenue though probably

there is no other item of public revenue to the assessment and collection of which so much attention is being paid. Partly the difficulty is inevitable in view of the extreme diversity of land tenures and agricultural operations that prevails in the country. Even the Indian Taxation Enquiry Committee was not able to ascertain the nature of the "share taken of the net produce of land, which share was till quite recently the chief source of revenue of the State."* This uncertainty arises because the basis of assessment is not the same for the whole country. "In India, the basis may be rentals or net assets. The rentals may be customary, controlled or assumed. The net assets may include or exclude the subsistence of the cultivator. The rate may vary with the opinion of the individual settlement officer as to the circumstances of the tract, with the conditions of the district at the time of settlement, with the conditions of tenancy, or with the opinions of the Local Government of the day as to what is a reasonable increase to take. As a consequence, it is impossible to say what is the incidence of the land revenue upon the land."* It is true that the demand of the State as a whole is being moderated. The Committee points out that if we take 100 as the index number of land revenue, of the net area sown, and of the export prices in 1903-04, the corresponding index numbers become 120·4, 107, and 217 in 1923-24. Thus while land revenue has increased by 20 *p. c.* prices have increased by 117 *p. c.*

And yet the complaint that the land revenue is an irksome burden is more or less general. This is so be-

* *Indian Taxation Enquiry Committee Report* : Para, 95,

cause this demand presses with special severity upon the *smaller* cultivators. Compared with the payment of rent and interest charges the land revenue may be a small charge, but it is just the last straw that breaks the camel's back. It has all the unwelcome element of compulsion of a tax. The Taxation Committee is of opinion that even if the tax was made lighter, it will not necessarily improve the condition of the ryot. "The difficulties of the poorest cultivator arise, not out of the land revenue itself, but out of a combination of circumstances of which the chief feature is a large extension of uneconomic holdings. The real relief of the poorest cultivator in these circumstances is to be found in a better system of rural economy generally rather than in a change of the land revenue system."* To remove all uncertainty about this payment the Committee recommends that the basis of settlement should be the "annual value" by which term they mean the gross produce less cost of production, including the value of the labour actually expended by the farmer and his family on the holding, and the return for enterprize."† This annual value would be equivalent to the rent. The Committee thinks that the State demand should not exceed the standard rate of 25 p.c. of the annual value.

In view of the tendency of rentals to rise on account of competition for land, the State demand, based upon it, will rise *pro tanto*. It is not quite certain how far enhanced rentals and growing land revenue are a sign of agricultural prosperity. It is clear at any rate that the State ought to moderate its own demand and define it accurately, exempt all private improvements

* *Taxation Enquiry Com. Report* : para, 103.

† Para. 103.

from enhancement, and thus teach, by its own *example* rather than by precept or propaganda, the landholder and the money lender not to kill the goose that is silently laying a golden egg for all of them.

(3) COURSE OF AGRICULTURAL WAGES IN THE BOMBAY PRESIDENCY (PROPER) 1889-1923—In the preceding section something has been said about the share of the landlord, the moneylender and the State in the produce of land. Let us next consider the wages of the agricultural labourer. In this connection we are particularly fortunate in having the results of an exhaustive enquiry into agricultural wages for the period 1900-1922 for the whole of the Bombay Presidency by Mr. G. Findlay Shirras in 1924, at that time, Director of the Labour Office, Government of Bombay. The results of this enquiry were partly vitiated by the mistake of taking 1900 as the starting year. It is well known that that year marked the worst famine year of the last century and agricultural wages in the Bombay Presidency were at their lowest. The enquiry was, therefore, extended backwards to the year 1889, the necessary statistical material being obtained from the office of the Director of Agriculture, Poona. The backward extension of the enquiry clearly brought out that in the whole period 1889-1923 the wages were at the lowest point in 1900, owing to famine of that year. The results of the first enquiry are to be found in an exhaustive report by Mr. Findlay Shirras, and of the revised enquiry in the Jan. 1925 number of the *Bombay Labour Gazette*. The method and the main conclusions of both the enquiries may be thus presented.

The Presidency was divided into 'natural divisions'—of Sind, Gujrat, the Deccan, Konkan and

the Karnatak. The agricultural labourers were divided into three classes : field labourers, ordinary labourers and skilled labourers. We may roughly define these three classes as follows. *Field labour* represents labour of a casual nature, mainly of a seasonal character. It includes various classes of labourers on the field—ploughmen, reapers, sowers, weeders and transplanters. The *ordinary labourers* represent a heterogeneous class. It is the class from which unskilled labourers for non-agricultural purposes are recruited. Such labourers are required on large fields for the purpose of embankment, well-digging, canal-silt clearing, and for all the more important work on a farm which sometimes requires a higher degree of skill than that possessed by the field labourer. The *skilled labourers* are not exclusively agricultural for they work for the non-agricultural population as well. They include the carpenter, the mason, blacksmith and the leather worker. Such artisans are not strictly agricultural labourers, though the wages paid to them are governed by those paid to similar artisans in the villages.

To appreciate the course of agricultural wages in our Presidency we must bear in mind certain facts about the growth of the population. In the period under report the Presidency suffered from severe famines in 1899–1900, from plague in 1896–1907 and 1915–18, and finally from influenza in 1918. As a result the *total* population actually declined from 27·1 millions in 1911 to 26·8 millions in 1921. Confining ourselves to *agricultural* population we find that persons engaged in agriculture (including agricultural labourers) declined (for the whole Presidency) from 5952 thousand in 1911 to 5090 thousand, in 1921 *i.e.* by 14 *p.c.* and the agricultural labourers alone declined from

2531 thousands to 1606 thousands *i.e.* by 37 *p.c.* in the same period.

In the first enquiry of Mr. Findlay Shirras changes in wages were considered according as the labourers lived in 'urban' areas or in 'rural' areas. Urban areas were those which included large towns and where, therefore, there was appreciable demand for labour for industrial purposes. The 'rural' areas were those which were away from towns and were purely agricultural. As was to be expected, the agricultural wages were *higher* in the urban areas than in rural areas.

It will not serve any useful purpose to summarise here the figures of the first enquiry of Mr. Findlay Shirras because, as stated before, his selection of 1900 as the basic year was unfortunate. His figures showed a remarkable increase in agricultural wages since 1900 and he explained it thus. "The increase in prices especially from 1905, the decrease in the supply of labour as compared with the demand owing to plague during the years 1902-1907 and influenza in 1918, the increased mobility of labour consequent on an increase of communications, and the general expansion of commerce and industry mainly account for the large leap upwards in wages in this Presidency during the first two decades of the present century."*

If we take the results of the second enquiry ranging over the period 1889-1923 and confined to the strictly *rural* areas in Gujrat, Deccan, Konkan and Karnatak we may represent the results in the following two tables.

In the first table the *actual daily* wages paid are shown: in the second table the index numbers for those wages are given on the basis of wages in 1889 being taken as equal to 100.

* *Report on Enquiry into Agricultural Wages* by Findlay Shirras : p. 21.

Field Labour				Ordinary Labour				Skilled Labour				
Year	Guj.	Decc.	Konk.	Karn.	Guj.	Decc.	Kon.	Karn.	Guj.	Decc.	Kon.	Karn.
	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.
1889	0-2-8	0-3-0	0-3-7	0-2-11	0-2-9	0-3-9	0-4-2	0-3-7	0-9-4	0-10-1	0-11-1	0-8-8
1895	0-2-10	0-3-4	0-3-6	0-3-1	0-3-2	0-3-9	0-3-8	0-3-8	0-10-2	0-9-7	0-10-7	0-8-9
1900	0-2-2	0-2-3	0-3-1	0-2-6	0-2-0	0-2-9	0-4-3	0-2-10	0-8-4	0-7-8	0-10-3	0-6-11
1904	0-2-5	0-2-9	0-3-2	0-3-4	0-2-4	0-3-2	0-3-11	0-3-9	0-8-10	0-8-3	0-10-5	0-8-7
1909	0-3-8	0-3-4	0-3-11	0-3-4	0-3-5	0-4-2	0-4-4	0-3-6	0-11-5	0-10-2	0-10-10	0-8-4
1914	0-4-7	0-4-5	0-4-8	0-4-6	0-4-6	0-5-0	0-5-5	0-4-5	0-14-2	0-11-2	0-12-7	0-9-9
1919	0-5-11	0-6-7	0-5-10	0-6-9	0-6-11	0-7-4	0-7-1	0-6-9	1-2-7	0-14-9	0-15-8	0-14-1
1923	0-9-0	0-6-10	0-9-8	0-6-2	0-9-5	0-7-6	0-10-2	0-6-9	1-15-3	1-1-4	1-4-10	0-14-7

Year	Field Labour				Ordinary Labour				Skilled Labour			
	Guj.	Decc.	Konk.	Karnt.	Guj.	Decc.	Konk.	Karnt.	Guj.	Decc.	Konk.	Karnt.
1889	100	100	100	100	100	100	100	100	100	100	100	100
1895	106	111	98	106	115	100	88	102	109	95	96	101
1900	83	75	86	86	73	73	102	79	89	76	93	80
1904	91	92	88	114	85	84	94	105	95	88	94	99
1909	138	111	109	114	130	111	104	98	122	101	98	96
1914	172	147	130	154	164	133	130	123	152	111	114	113
1919	222	219	163	231	252	196	170	188	199	146	141	163
1923	338	228	270	211	343	200	244	188	335	172	188	168

The tables show (1) that wages in the famine period 1900-1902 marked the lowest level, they being higher in the preceding as well as in the following years. (2) The economic position of the rural tracts of Gujrat rose more rapidly than in other natural divisions. (3) The disturbance caused by the famine of 1899 was much less violent in Konkan than elsewhere.*

In interpreting the tables given above certain facts must be carefully borne in mind. (1) The figures are the *daily* wages. But agricultural labour is proverbially seasonal. In India it is particularly liable to the vicissitudes of a scanty and uncertain rainfall. It will be wrong to conclude, therefore, that the *monthly* or *annual* wages of the labourer can be found by multiplying the daily wages by 30 or 365. There is much unemployment, for which allowance must be made. (2) The figures represent *cash* payment. Cash payments have mostly displaced payments in kind. Where the labourers get a grain allowance or other perquisites, in addition to cash payment, this must be taken into account. (3) The figures represent *nominal* wages. We must take into account the rise in prices. As Mr. Shirras points out† real wages are found by the following formula :

$$\text{Real Wage Index Number} = \frac{\text{Money Wage index No.} \times 100}{\text{Cost of living index No.}}$$

In computing the cost-of-living index numbers we must take into account the rise in prices of food grains, other articles of food, kerosene oil and cloth-

* For the second Enquiry see *Labour Gazette*, Jan. 1925 : pp. 503-512.

† Page 21 of his *Report*.

ing, which are the principal items of expenditure in the 'family budget' of an agricultural labourer. Applying the above formula Mr. Findlay Shirras came to the conclusion that the *real* wages also had increased—though slightly—in the post-war period.

In this connection Mr. Findlay Shirras also points to the general complaint that the labourers now work for *shorter* hours than before. 12 hours were common, say, 10 years ago; it is now 9 to 10 hours.

(4) WAGES IN TEXTILE INDUSTRY IN BOMBAY CITY—The enquiry into the wages of workers in the textile industry in the Bombay Presidency was also conducted by the Labour Office, Bombay, under the direction of Mr. G. Findlay Shirras.* The object of the enquiry was to ascertain the extent of rise in wages that had taken place in the case of textile workers in 1921 as compared with the pre-war year. Information about the earnings in the months of May of 1914 and 1921 was, therefore, collected from mills in all parts of the Presidency and tabulated. A fresh enquiry was made by the Labour Office in August 1923 and its results are to be found in the May number of 1925 of the *Labour Gazette*. The second enquiry was more comprehensive than the first as it included all textile mills in the Presidency and a larger per centage of workers. We shall deal here with the wages of the textile workers in Bombay City only.

Before proceeding to read the figures the following explanation should be borne in mind. In the first place, the workers are either time-workers or piece-workers. In Bombay city, in the 1923 August enquiry,

* *Report on an Enquiry into Wages and Hours of Work of Textile Workers in Bombay, 1923.*

53·2 *p. c.* of the male workers were time-workers as against only 33·1 *p. c.* of the females; and as many as 97·1 *p. c.* of the 'big lads' were time workers. Secondly, there are different classes of workers. The more important are jobbers (males), weavers (males), further classified according to the number of looms each attends, mule-spinners (males), ring-spinners (males and females of all ages are found in this department.) reelers (almost exclusively females), winders (three-fourths are women), and frame-tenters (where big lads and children are employed, but no women). The wages of these different classes differ. Daily 'average wages' are found by dividing the total payment for a whole month in a particular department by the number of working days and by the number of workmen. In finding out the daily averages only the regular employees of the mills were taken into account, spare hands and substitutes being excluded. Again, the wages (daily or monthly) are the actual earnings, including monthly bonus and special allowances which are regarded as of the nature of wages, but excluding overtime pay, and the annual bonus, if paid, and all remuneration in the form of grain or clothing or accommodation at rates below market prices or rentals.

In Bombay, the wages are paid monthly, and accordingly the monthly wage is more significant.

Number of work-people covered by wages returns.

Bombay City	May 1921	August 1923
	132,556	155,479

According to age and sex they were divided as follows.

<i>Bombay City</i>			<i>Average daily earnings</i>	
	1921 May	1923 Aug.	1921 May	1923 Aug.
Men	99,014	112,170	Rs. a. p. 1—5—6	Rs. a. p. 1—7—2
Women	19,584	30,527	0-10-9	0-12-5
Big lads	11,765	12,043	} 0-11-1	0-12-3
Children	2,193	739		
	132,556	155,479		

In calculating the average *monthly* average we meet with the difficulty due to the practice of workmen to remain absent from work. This absenteeism in many cases is due to illness or other unavoidable circumstances, but we have already seen (page 254) that the Indian worker remains absent often for no excuse at all. The difference between the full working days of a month and the number of days for which a worker actually works is often great. Absenteeism to some extent depends upon whether the worker is a time or piece-worker, it being more marked among piece-workers than among time-workers. Thus the *actual* wages of the worker and his *potential* wages (*i. e.* the wages he would receive if he worked for all days) rarely coincide.

In the following table the average monthly wages for the month of May 1914 have been given. But as no regular Census was taken in that year, the figures were arrived at by rough calculation.

Actual Monthly Earnings per head				Potential Wages
	May 1914	May 1921	Aug. 1923	Aug. 1923
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Men ...	18-6-8	34-15-2	35-10-7	39-1-6
Women.	10-0-10	17-6-6	17-5-5	20-15-3
Big lads & Children.	9-6-7	18-0-10	17-14-0	20-10-9

In the last column the *potential* wages are given for comparison to show the serious loss the workers suffer on account of absenteeism.

The workers whose wages have been shown above do *not* include the management and the higher staff—such as chief engineers, spinning and weaving masters. Similarly workers on the Power House and Maintenance Staff, Stores and Godowns, the Sepoy Department and the Clerical establishment are not included.

The wages considered above are *nominal*. To find out the increase in the *real* wages, we must take into account the rise in the cost of living. Taking the cost of living index number as 100 for July 1914, it was 167 in May 1921 and 154 in August 1923. The

figures show a *real* increase in wages of the textile workers in Bombay City.

(5) COST OF LIVING OF WORKING CLASS FAMILIES IN BOMBAY CITY—Having considered, as an example, industrial wages let us next proceed to examine the cost of living and standard of living of workmen generally in the city of Bombay.

In 1921-1922 the Labour Office, Bombay, conducted an enquiry into the cost of living of the working classes in Bombay City, under the direction of Mr. G. Findlay Shirras. No less than 2473 working class family budgets and 603 single men's budgets were tabulated. The families were representative of most industries and of most castes, though the Hindus formed 90 *p.c.* by caste, and the mill workers formed 50 *p.c.* by industry of the total families examined. Information as to income and expenditure was obtained from the families and tabulated in the Labour Office.

The families were classified according to *income* as follows :

Income of total family	No. of families	Percentage of total
Below Rs. 30 p. m.	68	2·7
Between 30 & 40	272	11·0
„ 40 & 50	834	33·7
„ 50 & 60	539	21·8
„ 60 & 70	484	19·6
„ 70 & 80	167	6·8
„ 80 & 90	70	2·8
Rs. 90 & over	39	1·6
	<hr/> 2473	<hr/> 100

Regarding the *size* of the family it was found that the average family consisted of 4·2 persons, *viz.* 1·1 men, 1·1 women and 2·0 children (under 14), exclusive of ·6 dependents living *away* from the family. Families with 5 persons, *i.e.* husband, wife and 3 children formed only 16·1 *p.c.* of the whole. In 53·5 *p.c.* of the families there was only *one* wage-earner, and in 39·1 *p.c.* there were *two*.

Turning now to *expenditure*, the following percentage was obtained as to the main groups of commodities on which it was incurred in 1921-22.

Food ...	56·8 <i>p.c.</i>	When the percentage
Fuel & lighting	7·4 "	of expenditure was
Clothing ...	9·6 "	considered in relation to
House rent ...	7·7 "	families with different
Miscellaneous	18·5 "	incomes it was found that
	<hr/>	the percentage on food,
Total	100·0	fuel, and house-rent was
		<i>highest</i> in the case of

families with *low* incomes. In the case of families with higher incomes a *less* percentage was spent upon food and more upon the other needs of life. The results of the Bombay enquiry seem to bear out the generalization known as Engel's Law, that the greater the earnings a group of labourers earn, the smaller will be the percentage of those earnings spent on food.

As the working-class families belonged to different castes, it is not easy to make generalizations with regard to diet. But the industrial worker in Bombay is mostly a vegetarian. Of the total expenditure on food, as much as 60·2 *p.c.* was spent on food grains, the amount spent on milk, ghee and the like being negligible in the case of the poorest families. As the income of the family increased, of

the expenditure on food, a larger percentage was spent on 'other food,' *i.e.* on vegetables, milk and ghee, tea, sugar, refreshments, etc. and a smaller percentage on food grains. Mr. Findlay Shirras has compared the diet of an industrial worker in Bombay with the diet prescribed in the Bombay Jails and again with the diet according to the Bombay Famine Code Regulations, and his conclusion is that though the diet of the industrial worker is more varied it is quantitatively less than that prescribed in the Bombay Jail Manual and equals the maximum allowed by the Famine Code. He adds: "This is not unknown in Western countries where paupers in workhouses and criminals in jails are, so far as diets go, frequently stated to be in a better position than the average industrial worker."*

Passing over fuel and lighting, and clothing, we come to conditions of housing of the working classes. We have already seen (page 123) how these conditions are deplorable in Bombay. Of the families examined 97 *p.c.* lived in one-room tenements. Overcrowding is closely connected with infant mortality, and the rate was as high as 828.5 per 1000 births, according to the Report of the Health officer in 1921, for one-room tenements, 321.9 for two-room tenements and 191.4 for three-room tenements. This points to the urgency of improvement of housing conditions about which something has been said under the welfare of labour (page 278). Mr. G. Findlay Shirras quotes an authority to the effect: "Good houses mean the possibility of home life, happiness and health; bad houses spell squalor, drink, disease,

*Findlay Shirras : *Report on Enquiry into Working-class Budgets* : page 21.

immorality, and crime and in the end demand hospitals, prisons, and asylums in which we seek to hide away the human derelicts of society that are largely the result of society's own neglect.'*

Miscellaneous expenditure includes such items as cooking utensils, hair-cutting, washing of clothes, soap, medicine, education, travelling, tobacco, *pan-supari*, amusements and interest on debts. Comparatively little is available for being spent on medical help or on education. This is very distressing. On the other hand expenditure on drink, though naturally difficult to ascertain, varies from 4 to 10 *p.c.* of the total expenditure. Drinking is the besetting evil of town life. The wretched conditions of life and work foster this habit. Though the consumption of liquor is decreasing in agricultural areas, it is increasing in urban and industrial areas and it would indeed be a very serious count against industrialism if it also meant alcoholism. The interest charge also is a considerable drain on the resources of the family and a reference has already been made to it (page 256). The rate of interest is one anna per rupee per month *i.e.* 75 *p.c.* or even twice this rate. As in the case of agriculture, so in the case of industries also, self-help through Co-operation is the true remedy.

What light do these figures throw upon the standard of living of the working classes in Bombay? The standard is distinctly low. Prof. Findlay Shirras defines standard of life as dealing "with the distribution of the family income on necessities for existence, such as the requisite supply of cereals, of pure water, of clothing and of house room; with

* Page 25 of Mr. Findlay Shirras' Report.

conventional necessities such as tobacco and *pan-supari*, i.e. with things that could be dispensed with but are so strictly demanded by the Bombay worker that he would give up the consumption of those articles which are really necessary for efficiency rather than go without these conventional necessities. There are, lastly, luxuries such as expenditure on amusements, and on festivals, which are really superfluous as a means towards production. There is waste when the worker consumes less than is strictly necessary for efficiency.”*

This shows the importance of the subject of wise spending which, as Mr. Shirras truly observes, is the crux of the whole labour problem. We must distinguish, in the first place, between a *high* standard of living and an *efficient* standard of living. The standard becomes efficient when every item of expenditure contributes to increase the worker's efficiency. Every increase in efficiency, in that case, also raises the standard and in that case the high standard is not difficult to maintain. But a high standard which is not an efficient standard means an unnecessarily *expensive* standard which is sure to ruin the worker in the long run. The Indian worker must, therefore, avoid all expenditure which not only does not contribute towards efficiency but actually militates against it. Thus the expenditure on liquor is a distinct waste.

Again, the standard of living does not consist merely in the consumption of food, clothing and the like. It also includes expenditure upon the more intangible needs of life which contribute to the moral

* Page 12 of Mr. Findlay Shirras' Report.

uplift of the worker. It has been found that a rise in wages, in the case of the Indian worker, instead of inducing the worker to be more efficient only makes him more averse to work. Higher wages mean absenteeism. This is, of course, true not of all workers. But so far as the statement is true, it shows that the worker is having *such* a low standard of life that he does not even *feel* the higher needs of life, and consequently, he idles away his time as soon as enough is earned to satisfy that low standard. This shows the urgency of educating the worker in appreciating the higher needs of life and enabling him to form habits of regular and efficient work. As Dr. Marshall well phrases it : "a rise in the standard of life implies an increase of intelligence and energy and self-respect ; leading to more care and judgment in expenditure, and to an avoidance of food and drink that gratify the appetite but afford no strength, and of ways of living that are unwholesome physically and morally. A rise in the standard of life for the whole population will much increase the national dividend, and the share of it which accrues to each grade and each trade."*

(6) INDEX NUMBERS OF PRICES AND THE COST OF LIVING—The phenomenal rise in prices that took place during and after the War and the industrial unrest that followed as a result of the demand on the part of wage-earners for higher wages to meet the higher 'cost of living' have brought into prominence the study of wholesale and retail prices, as well as of the cost of living. Almost all the countries now officially publish the course of prices—wholesale and

* Quoted by Mr. Findlay Shirras : p. 14.

retail—and also cost-of-living index numbers, and practical use is made of this information in the settlement of disputes as to rise in or reduction of wages between the Labourers and Capitalists. Different countries have adopted different methods of computing the index numbers but the general principles will be clear from the following examples of some well-known wholesale price index numbers. In the *United Kingdom*, we have the Board of Trade index number (which has for its basis average 1913 prices=100) which is a geometric mean of 150 monthly price quotations arranged in eight different groups as follows :—cereals (17 items), meat and fish (17 items), other foods (19 items), iron and steel (24 items), other metals and minerals (20 items), cotton (16 items), other textiles (15 items), and miscellaneous (24 items). For the *United States* we have the Bureau of Labour index number published monthly. It is based upon 404 commodities arranged in 9 groups thus : Farm products (57 items), food (83 items), clothing materials (65 items), fuels (19 items), metals and metal products (37 items), building materials (48 items), chemicals and drugs (39 items), house furnishing goods (31 items) and miscellaneous (25 items). The 1913 price is taken as 100. For *India* we have got two index numbers. The *Calcutta* index number is prepared by the Director General of Commercial Intelligence and is based upon 71 items, and the *Bombay* index number is prepared by the Labour office, Bombay, and is based upon 44 items. The latter are divided into 11 groups : cereals (7 items), pulses (2), sugar (3), other food (3), oil seeds (4), raw cotton (5), cotton manufactures (6), other textiles (2), hides and skins (3), metals (5), miscellaneous (4). In constructing both *Calcutta*

and Bombay index numbers the arithmetical averages are used and a certain amount of rough weighting is secured by taking quotations of different grades of some of the important items. Prices in July 1914 are taken as equal to 100 in both cases. The Director General of Commercial Intelligence, Calcutta, is thinking of publishing index numbers for different commercial centres in India for the sake of more reliable and convenient comparison. The Index numbers of Calcutta prices are given on* page 73, and the price-levels in India, United Kingdom and the United States are, given on page 382.

The index numbers of wholesale prices, though they are useful from the point of view of the Quantity Theory of Money, are not so for finding out the cost of living of a particular class of workmen. The wholesale price index number contains a number of articles which never enter into the consumption of an average workman; on the other hand important items of expenditure of a workman, *e.g.* house rent, lighting, etc. are not included in the general index number; finally, as the prices on which the general index number is based are *wholesale*, they lose their significance from the point of view of the consumer who has to pay *retail* prices. For these reasons it is customary to construct special 'cost of living' index numbers. The particular items that 'will be included in the index number depend upon the object of our enquiry. Some times different index numbers may be used. "Roughly there are two principal methods of assigning weights to the various commodities included in a cost-of-living index. They are (a) the family budget method and (b) the aggregate expenditure method. The family budget method

implies the collection of information regarding the quantities consumed and the expenditure incurred by a standard or theoretical family of the class or community for which the index is compiled. Thus the standard budget weights are based on the average actual consumption or expenditure by a number of families for a certain period; and the theoretical budget method is based partly on family budgets and partly on theoretical considerations. The aggregate expenditure method assumes the possibility of determining the importance of various commodities according to their uses as obtained by adding production and imports and deducting exports.”*

We have got a valuable cost-of-living index number prepared by the Labour Office, Bombay and published monthly in the *Labour Gazette*. It is based upon the second method of assigning weights to commodities referred to above, *i.e.* by calculating the aggregate consumption. The commodities chosen are: cereals, pulses, other food articles, fuel and lighting, clothing and house rent. The *retail* prices are collected at 12 different centres in the Bombay city every month. The prices are then reduced to the base of July 1914 prices=100. The Bombay method will be clear from the following table which compares the ‘cost of living’ for Bombay Workmen in July 1927 and July 1914.

* *Bombay Labour Gazette*. April 1927 : p. 674.

Working class cost-of-living index July 1927.

Articles	Unit of quantity	Annual consumption (Mass units) in crores	Price per unit of quantity		Price x mass units	
			July 1914	July 1927	July 1914	July 1927
Cereals	Maund		Rs.	Rs.	Rs.	Rs.
Rice	"	70	5.59	7.69	391.58	538.51
Wheat	"	21	5.59	7.43	117.47	156.07
Jowari	"	11	4.35	5.78	47.89	63.59
Bajri	"	6	4.31	5.77	25.88	34.63
Total Index No.	Cereals	—	—	—	582.82 100	792.80 136
Pulses	Maund					
Gram	"	10	4.30	6.56	43.02	65.63
Turdal	"	3	5.84	8.97	17.53	26.92
Total Index No.	Pulses	—	—	—	60.55 100	92.55 153

Working class cost-of-living index July 1927—Contd.

Articles	Unit of quantity	Annual consumption (Mass units) in crores	Price per unit of quantity		Price x mass units	
			July 1914	July 1927	July 1914	July 1927
Other food articles	Maund					
Sugar	"	2	7.62	13.69	15.24	27.39
Gul	"	7 $\frac{1}{2}$	8.56	13.69	59.90	95.85
Tea	"	5	40.00	77.78	1.00	1.24
Salt	"	28	2.13	3.41	10.65	17.06
Beef	Seer	33	0.32	0.54	9.04	15.04
Mutton	"	14	0.42	0.85	13.76	28.18
Milk	Maund	1 $\frac{1}{2}$	9.20	17.58	128.77	246.16
Ghee	"	11	50.79	99.41	76.19	149.11
Potatoes	"	3	4.48	7.74	49.27	85.14
Onions	"	3 $\frac{1}{2}$	1.55	3.58	4.66	10.72
Cocoanut oil	"		25.40	28.58	12.70	14.29
Total	Other food articles	—	—	—	381.18	690.88
Index No.	"	—	—	—	100	181

Working class cost-of-living index July 1927—Contd.

Articles	Unit of quantity	Annual consumption (Mass units) in crores	Price per unit of quantity		Price x mass units	
			July 1914	July 1927	July 1914	July 1927
Fuel & Lighting						
Kerosene	Case	5	4.38	7.66	21.88	38.28
Firewood	Maund	48	0.80	1.28	38.02	61.49
Coal	"	1	0.54	0.77	0.54	0.77
Total Index No.	Fuel & lighting	—	—	—	60.44 100	100.54 166
Clothing						
Chudders	lb.	27	0.59	0.91	16.04	24.46
Shirts	"	25	0.64	0.97	16.03	24.23
T. cloths	"	36	0.58	0.84	20.99	30.38
Total Index No.	Clothing	—	—	—	53.06 100	79.07 149

Working class cost-of-living index July 1927—Contd.

Articles	Unit of quantity	Annual Consumption (Mass units) in crores	Price per unit of quantity		Price x mass units	
			July 1914	July 1927	July 1914	July 1927
	House Rent per month	10	11.302	19.44	113.02	194.40
	Index No.— House Rent				100	172
Grand Total Index Number					1251.07 100	1950.24 156

The method adopted by the Ministry of Labour for constructing the cost of living index number for England is based upon family budgets. Commodities consumed by workmen are divided into 5 groups: *viz.*, food (20 items), clothing (8 items), fuel and lighting (5 items), rent (1 item), and sundries (8 items). The index is based upon July 1914 prices which are taken as 100. Prices are collected at the beginning of each month from representative retailers in about 630 localities for food articles and in 97 towns for clothing.

Both the group and general index numbers are arrived at by weighting the items according to their relative importance in the average expenditure of 1944 working class family budgets collected by the Board of Trade in 1904, the data being supplemented by those obtained in an enquiry into rents, retail prices, etc., in 1912.

The movement of the cost of living index number in Bombay and for England will be gathered from the following table.

Year	Bombay	United K.	Year	Bombay	United K.
1914 July	100	100	1921 July	177	219
1915 „	104	125	1922 „	165	184
1916 „	108	148	1923 „	153	169
1917 „	118	180	1924 „	157	170
1918 „	149	203	1925 „	157	173
1919 „	186	208	1926 „	157	170
1920 „	190	252	1927 „	156	166
			„ Sept.	154	165

A comparison of the cost of living index number with the index number of wholesale prices will bring out the general parallelism of movement which is, indeed, to be expected. The cost of living index number, as calculated above, is based upon prices as expressed in domestic currency. It can be converted into the cost of living index number according to *gold* prices, if the domestic and gold prices are not adjusted, by taking into account the rate of exchange. Such comparisons of the 'gold' cost of living in different countries have assumed much importance on account of the slowness with which (a) the cost of living adjusts itself to the domestic prices and (b) the domestic prices adjust themselves to world prices. Reference has been made to this subject in connection with the controversy about the adjustment of Indian prices to world prices at the ratio of 1s. 6d. per rupee.

STATISTICAL APPENDIX

N. B.—The statistics given here *supplement* those given in the text. They are the latest that I could get.

See Page 151.

Total Area of India in 1924-25.

667,646,000	Acres in British India
419,840,000	Indian States under Govt. of India, British Baluchistan, etc.
<u>76,118,000</u>	Indian States under Local Govts.
1,163,604,000	Acres for the whole of India.

By village records we get an area of 664,538,000 instead of 667,646,000 which is obtained by survey.

See Page 164.

The 664,538,000 acres were distributed as follows:*

	In 1,000 acres.	Per cent of total.
Area under Forests 	86,514	13
Not available for Cultivation ...	150,971	22·7
Culturable waste other than fallow.	152,894	23·0
Fallow land 	47,179	7·1
Net area sown with crops ...	226,980	34·2
Area irrigated 	45,299	
Total Net Area (excluding area irrigated) 	664,538	—

* Chapter VIII.

The Provincial figures are given below :—
Figures for the Provinces (in thousand acres).

Province.	Cultivated.		Uncultivated.		Forests
	Net area actually sown	Current Fallows	Culturable waste other than fallow	Not available for cultivation	
Madras ...	33,339	10,068	12,466	21,515	13,117
Bombay ...	31,917	11,034	6,881	19,758	9,269
Bengal ...	23,528	4,683	6,207	10,190	4,515
U. Provinces ...	35,121	3,156	10,431	10,053	9,322
Punjab ...	26,940	3,169	15,442	12,550	2,166
Burma ...	17,046	3,741	60,392	54,795	19,679
Bihar & O. ...	25,269	5,519	6,974	7,861	7,459
C. P. & Berar ...	24,895	3,085	14,836	4,841	16,443
Assam ...	5,975	1,790	16,177	5,511	3,715
N. W. Fr. Pr. ...	2,239	589	2,688	2,640	359
Minor ...	711	345	400	1,257	470
Total ...	226,980	47,179	152,894	150,971	86,514

*Statistics of Irrigation for 1924-25

	Area Irrigated				In thousand acres		
	By Canals		Tanks	Wells	Other Sources	Total Irrigated	% to areas sown
	Govt.	Private					
Madras	3,530	247	3,286	1,572	478	9,113	27
B'bay	3,334	95	125	556	170	4,280	21
Bengal	150	119	419	25	420	1,133	5
U. P.	1,879	22	66	4,309	2,219	8,495	24
Punjab	9,273	494	13	3,192	111	13,083	49
Burma	610	307	211	20	302	1,450	9
B. & O.	829	910	1,810	628	1,103	5,280	21
C. P. & B.	—	859	—	104	53	1,016	4
Assam	—	195	—	—	239	434	7
N. W. Fr. Pr.	360	392	—	79	41	872	39
Mfnor	20	—	38	85	—	143	—
Total ...	19,985	3,640	5,968	10,570	5,136	45,299	—

* Statistical Abstract : p. 313.

*The Area sown was distributed as follows : (In 1000 acres)

Rice ...	79,306	Sugar ...	...	2,655	Cotton ...	...	17,414
Wheat ...	24,848	Total ...	...	2,655	Jute ...	...	2,738
Barley ...	6,970	Linseed	...	2,560	Other fibres	...	830
Jowar ...	22,470	Sesamum	...	3,525	Total fibres	...	20,982
Bajra ...	11,966	Rape & Mustard	...	3,920	Dyes & Tanning	...	721
Ragi ...	3,980	Groundnut	...	2,755	Drugs & Narcotics	...	2,252
Maize ...	5,348	Cocoanut	...	604	Fodder crops	...	8,836
Gram ...	16,552	Castor ...	...	523	Miscellaneous	...	982
Other grains and pulses	28,775	Other oil seeds	...	1,127	non-food	...	48,787
Total food grains	200,215	Total oil seeds	...	15,014	Total non-food	...	48,787
Condiments and Spices	1,432						
Fruit & Vegetable	5,210						
Miscellaneous	1,142						
Total	7,784						

* Statistical Abstract.

See Page 158.

The Percentage distribution of area is as under.			Estimated yield of certain important crops (including crops in certain Indian States)	
	In 1000 acres	%		Figs. are in thousand.
Food grains ...	200,215	77.2	Rice (cleaned)	31,072
Condiments & Spices	1,432	0.6	Wheat ...	8,876
Sugar ...	2,655	1.0	Tea ...	375,256
Fruit & Vegetables ...	5,210	2.0	Cotton ...	6,826
Miscell. food crops ...	1,142	0.4	Jute ...	8,062
Total food crops ...	210,654	81.2	Linseed	501
Oil seeds ...	15,014	5.8	Rape & mustard	1,219
Fibres ...	20,982	8.1	Sesamum ...	513
Dyes, &c. ...	721	0.3	Ground nut ...	1,485
Drugs, &c. ...	2,252	0.8	Raw sugar (gur)	2,546
Fodder crops ...	8,836	3.4	Coffee ...	30,476
Mis. non-food ...	982	0.4	Rubber ...	15,601
Total non-food ...	48,787	18.8		

tons.
"
lbs.
400 lb. bales
"
tons
"
"
"
"
lbs.
"

See Page 164.

Province	Population per 100 acres of sown area	No. of cattle per 100 acres of sown area	No. of cattle per 100 of population	Proportion of sown to total area
Madras ...	127	66	52	37
Bombay ...	57	34	60	40
Bengal ...	195	108	56	48
U. P.	129	88	68	52
Punjab ...	77	57	74	45
Burma ...	78	37	47	11
B. & O. ...	135	82	61	48
C. P. & B. ...	56	47	84	39
Assam ...	125	97	77	18
N.W.Fr. Pr.	102	49	48	26
Ajmer Mer- wara	140	128	91	20
Coorg ...	120	98	81	13
Delhi ...	224	71	32	59
Average for Br. India		67	62	

* *Agricultural Statistics of Br. India, 1924-25: Introduction.*

See Page 233.

Main Results of the Industrial Census in India in 1921.

Establishment	No.	No. of persons employed	No. of females per 100 males
I. Coffee Plantations ...	569	40,304	63
Rubber „ ...	135	17,262	31
Tea „ ...	1413	747,661	94
II. Collieries ...	628	181,594	39
Gold mines ...	7	32,186	6
Manganese „ ...	52	17,777	74
Mica „ ...	203	18,220	47
III. Stone quarries ...	240	25,470	36
IV. Cotton mills ...	2037	433,896	30
Jute „ ...	484	310,511	20
Wool „ ...	88	10,539	9
Silk „ ...	174	9,423	12
V. Tanneries ...	188	10,495	8
VI. Saw mills ...	246	20,788	44
VII. Brass & Copper works	300	14,095	3
Iron Foundries ...	103	18,517	15
Iron & Steel works ...	165	39,449	16
Metal factories ...	321	82,182	1

Establishment	No.	No. of persons employed	No. of females per 100 males
VIII. Brick factories ...	986	75,020	25
IX. Lac & Cutch factories	175	13,156	65
Oil mills ...	435	16,163	13
Paper mills ...	11	6,497	20
Petroleum refineries	27	33,534	1
Salt „ ...	201	13,158	28
X. Flour & Rice mills...	1300	49,991	18
Opium & Tobacco factories ...	439	20,646	36
Sugar „ ...	519	22,369	6
XI. Industries of Dress...	407	12,018	3
XII Furniture „ ...	157	6,670	—
XIII. Building „ ...	417	29,698	31
XIV. Motor-car works ...	136	10,278	—
Railway Works ...	186	112,532	—
Ship & Dock Yards	42	21,329	—
XV. Gas & Electric Works	92	11,707	2
XVI. Printing Presses ...	810	49,378	—
Total for all India ... (including others not specified above)	15,606	2,681,125	36

* Statistics of Joint Stock Companies

See Page 234.

Class of Company	Registered in India & operating in British India		Registered outside India & operating in British India		Paid-up Capital 000 Rs. Registered in India & operating in Br. India		Paid-up Capital in £1000 Registered outside India & operating in Native States	
	British India	Native States	British India	Native States	Br. India	N. States	Br. India	Native States
Banking and Loan ...	836	87	32	—	14,66,902	54,96	161,264	—
Insurance ...	66	14	137	1	3,13,07	3,98	51,800	87
Navigation ...	26	—	18	—	3,71,82	—	31,063	—
Railways & Tramways ...	46	2	25	—	14,88,94	7,95	35,626	—
Other Transit & Transport	128	15	11	—	3,45,65	22,26	8,003	—
Trading & Manuf. Cos. ...	1924	145	273	6	86,16,95	1,35,92	301,608	207
Tea ...	390	5	168	5	9,11,30	14,59	22,449	304
Other Planting Cos. ...	71	32	29	8	1,14,48	30,96	2,923	898
Coal Mining ...	251	1	6	—	11,77,46	—	222	—
Gold Mining ...	4	—	2	6	8,20	—	206	1,744
Other Mining & quarry ..	94	8	19	2	29,61,52	11,24	18,183	—

* Statistical Abstract Fourth Issue : pp. 539-48.

Joint Stock Co.s—*contd.*

Class of Company	Registered in India & operating in		Registered outside India & operating in		Paid-up Capital 000 Rs. Registered in India & operating in		Paid up Capital in £1000 Registered outside India & operating in	
	British India	Native States	British India	Native States	Br. India	N. States	Br. India	Native States
Cotton Mills	269	29	7	3	37,56,99	480,50	558	447
Jute Mills	54	—	6	1	17,07,35	—	4,726	72
Mills for Wool, Silk, etc.	25	2	—	—	3,42,06	14,24	—	—
Cotton Ginning & Pressing	109	6	2	—	2,33,93	7,78	150	—
Jute Presses	26	—	—	—	1,65,02	—	—	—
Flour Mills	29	3	—	—	1,28,58	4	—	—
Estate, Land & Building	101	2	3	—	6,15,49	40	242	—
Sugar	43	2	2	—	1,92,05	62	306	—
Other Companies	329	31	14	—	17,05,05	7,29	4,898	—
Total	4,821	384	754	32	266,22,90	9,92,81	644,233	3,761

See Page 239.

* Quantity and Value of Mineral Wealth for India 1924.

		Quantity 1000	Value in Lacs.
Coal (Tons)	...	21,176	1,496
Salt	„ ...	1,623	97
Gold (oz.)...	...	396	2,54
Pétroleum (gal.)	...	294,571	10,50
Saltpetre (cwt.)	...	143	22
Copper ore (tons)	...	3	16
Iron ore	„ ...	1,445	38
Lead	„ ...	51	2,35
Manganese	„ ...	803	3,78
Mica (cwt.)	...	40	20
Silver (oz.)	...	5,309	1,12
Tin ore (cwt.)	...	39	30
Zinc (tons)	...	15	11

Total Rs. 37,59 lacs.

Absorption of Currency by the Public 1898-1899 to
1924-25 (in Lakhs of Rs.)

Year	Rs.	Coins £s. & $\frac{1}{2}$ £s	Total	Currency Notes	Grand Total
1898-99	—161	—	—161	252	91
1899-1900	13,93	4,05	17,98	1,72	19,70
1900-01	8,62	3,05	11,67	—18	11,49
1901-02	—68	1,47	79	30	1,09
1902-03	2	3,23	3,25	2,59	5,84
1903-04	10,97	4,92	15,89	3,28	19,17
1904-05	7,43	4,41	11,84	37	12,21
1905-06	14,50	5,70	20,20	4,16	24,36
1906-07	18,00	7,70	25,70	3,83	29,53
1907-08	3,92	11,08	15,00	—3,85	11,15
1908-09	—1488	5,15	—9,73	2,35	—3,78
1909-10	1322	4,31	17,53	5,03	22,56
1910-11	3,34	2,15	5,49	19	15,68
1911-12	11,50	13,33	24,83	4,44	29,27
1912-13	1049	16,65	27,14	2,71	29,85
1913-14	5,32	18,11	23,43	2,65	26,08
1914-15	—6,70	8,43	1,73	—6,01	—4,29
1915-16	10,40	29	10,69	9,23	20,92
1916-17	33,81	3,18	36,99	13,89	50,88
1917-18	27,86	14,26	42,12	17,22	59,34
1918-19	45,02	5,21	50,23	49,29	99,52
1919-20	20,00	—3,32	16,77	20,20	36,97
1920-21	—25,68	—4,38	—30,06	—5,90	—35,96
1921-22	—10,46	2,78	—7,68	9,35	1,67
1922-23	—9,56	9,43	—13	3,87	3,74
1923-24	7,62	6,74	14,36	7,96	22,32
1924-25	3,65	14,53	18,18	—2,51	15,67

N.B.(—) means that the currency was returned from the public. £=15 Rs.
in this table.

* Appendix III to Appendix 3 to Report of the Hilton Young Commission.

* Exports and Imports of Merchandise; Net imports of Gold and Silver; Sales of Council Drafts and Reverse Drafts 1898-99-1924-25.

Year	Exports and Imports of Merchandise on Private Account			Net Imports of Treasure on Private Account			Govt. remittances to London	Reverse Drafts
	Exports (In Lakhs of Rupees)	Imports (In Lakhs of Rupees)	Net Exports (In Lakhs of Rupees)	Gold coin and bullion (In Lakhs of Rupees)	Silver (In Lakhs of Rupees)	Total (In Lakhs of Rupees)		
1898-99	112,72	68,38	44,34	6,05	3,97	10,02	18,884	—
1899-1900	108,98	70,71	38,26	9,44	3,57	13,01	18,704	—
1900-01	107,37	76,28	41,59	7,57	1,42	8,99	12,824	—
1901-02	124,46	81,52	42,95	5,04	6,25	11,29	18,536	—
1902-03	128,82	78,79	50,03	9,47	6,98	16,45	18,724	—
1903-04	152,96	84,82	68,18	16,33	7,46	23,79	23,784	—
1904-05	157,50	96,68	60,82	18,11	6,94	25,05	24,150	—
1905-06	161,71	103,08	58,63	9,45	5,02	14,47	31,886	—
1906-07	176,57	108,31	68,26	14,94	6,69	21,63	34,069	—
1907-08	177,36	129,90	47,46	17,35	10,03	27,38	15,747	70
1908-09	153,03	121,27	31,76	4,71	11,96	16,67	13,323	7,988
1909-10	187,88	117,06	70,82	21,68	9,37	31,05	27,867	156

Year	Exports and Imports of Merchandise on Private Account			Net Imports of Treasure on Private Account			Govt. remittances to London	Reverse Drafts
	Exports (In Lakhs of Rupees)	Imports (In Lakhs of Rupees)	Net Exports (In Lakhs of Rupees)	Gold coin and bullion (In Lakhs of Rupees)	Silver (In Lakhs of Rupees)	Total (In Lakhs of Rupees)		
1910-11	209.88	129.35	80.53	23.98	8.61	32.59	26,390	—
1911-12	227.84	138.57	89.27	37.77	5.29	43.06	26,917	—
1912-13	246.55	161.02	85.53	37.35	6.57	43.92	25,983	—
1913-14	248.88	183.25	65.63	23.32	6.24	29.56	31,201	—
1914-15	181.59	137.93	43.66	8.45	10.01	18.46	7,198	8,707
1915-16	197.38	131.99	65.39	4.90	5.58	10.48	20,810	4,893
1916-17	245.15	149.62	95.53	4.20	-2.16	2.04	31,672	—
1917-18	242.56	150.42	92.14	21.46	1.46	22.92	34,866	—
1918-19	253.85	169.03	84.82	2	6	8	22,539	5,315
1919-20	326.79	200.80	125.99	10.97	-15	10.82	31,226	24,544
1920-21	258.05	335.60	-77.55	-8.88	7.59	129	—	30,988
1921-22	245.44	266.34	-20.90	-2.79	14.95	1216	—	—
1922-23	314.32	224.31	90.01	41.18	18.17	59.35	2,570	—
1923-24	361.91	217.03	1,44.88	29.19	18.38	47.57	21,839	—
1924-25	398.36	243.18	1,55.18	73.78	20.06	93.84	40,770	—

* Appendix II to Appendix 3 to the Report of the Hilton Young Commission.

See Page 280.

* Absorption of gold (coin and bullion) in Crores of Rs. in India
Average for 5 years ending in

	1873- 74	1878- 79	1883- 84	1888- 89	1893- 94	1898- 99	1903- 04	1908- 09
Production	...	—	—	—	·71	2·01	2·95	3·40
Net Imports	...	1·38	4·13	3·08	2·10	2·25	6·18	9·35
Net Absorption	...	1·38	4·13	3·08	2·81	3·65	6·46	16·00
Net Progressive absorption.	1·38	4·63	15·24	35·17	51·74	61·19	88·31	152·24
	1913- 14	1918- 19	1921- 22	1922- 23	1923- 24	1924- 25	1925- 26	
Production	...	3·36	3·08	2·79	2·55	2·54	2·23	
Net Imports	...	28·15	—2·86	41·19	29·19	73·93	34·85	
Net Absorption	...	27·04	11·28	43·98	33·74	76·47	37·08	
Net Progressive absorption.	258·04	355·68	419·64	463·62	497·36	573·83	610·91	

N.B. *Net Imports* are found by subtracting the value of gold exported from gold imported.
Net Absorption is found by adding to or subtracting from the gold held by the public gold held by Government in Mints, Government Treasuries and Currency and Gold Standard Reserves.

Net Progressive Absorption is found by totalling from year to year the gold annually absorbed by the public as shown under net absorption.

The quinquennial averages are given for purposes of comparison only.

* *Review of Indian Trade* for 1925-26.

See Page 424.

* Note circulation in 1923-24, 24-25, 25-26 on 31st March (in Lakhs of Rs.)

	Gross circulation	Amts. held in treasuries	Notes in circulation with the public	Held by Imperial Bank at Head Offices	Active circulation
1923-24	179,01	174	177,27	20,34	156,93
1924-25	179,27	154	177,73	16,82	160,91
1925-26	186,88	129	185,59	22,43	163,16

* *Report of the Controller of Currency (1925-26)* : pp. 64-65.

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N. B.—Figures refer to Pages. The Index *supplements* the Table of Contents.

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